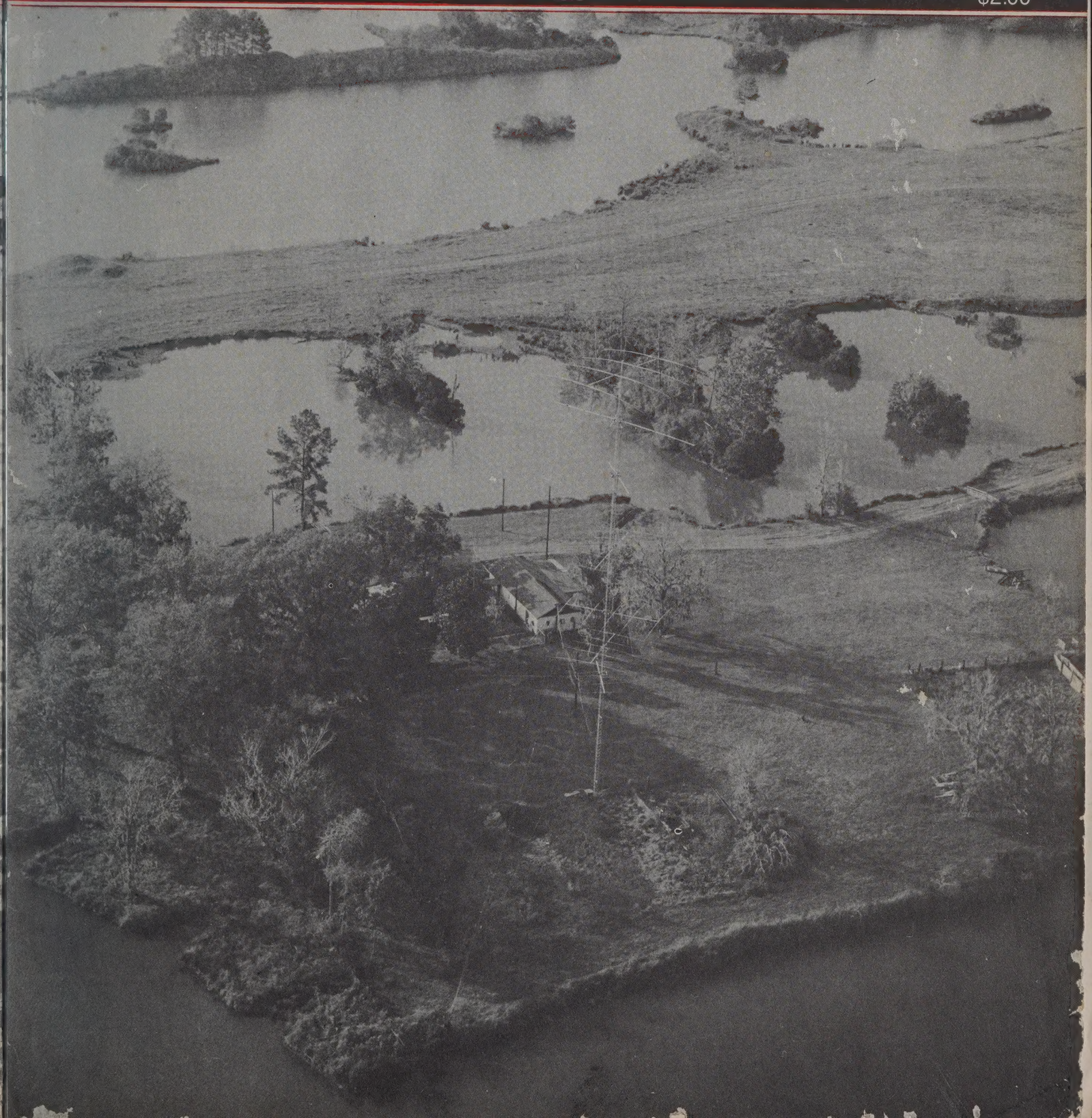
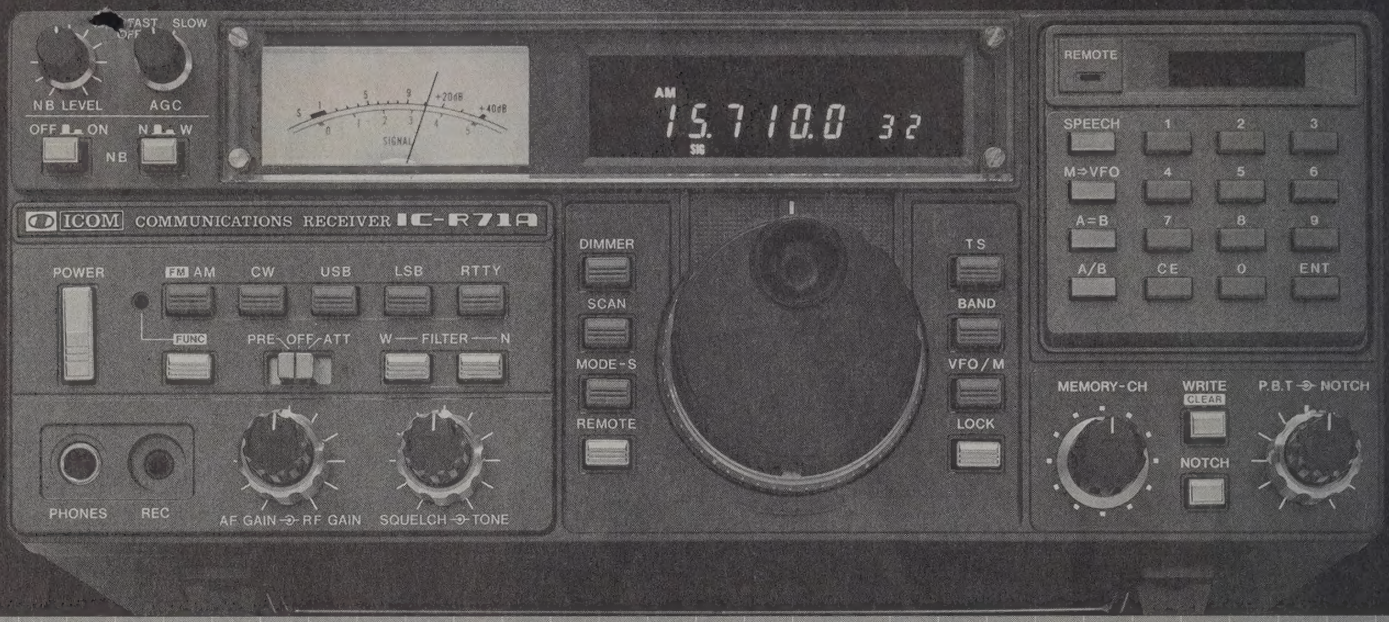
INTN'L MONTHLY MAGAZINE - BY AND FOR ACTIVE RADIOAMATEURS

RADIOSPORTING

JULY 1985 No.8 $2.00



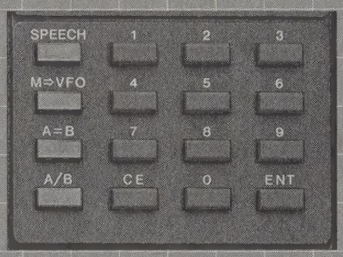
ICOM HF Receiver IC-R71A



The World Class World Receiver

ICOM introduces the IC-R71A 100KHz to 30MHz superior-grade general coverage HF receiver with innovative features including keyboard frequency entry and wireless remote control (optional).

This easy-to-use and versatile receiver is ideal for anyone wanting to listen in to worldwide communications. With 32 programmable memory channels, SSB/AM/RTTY/CW/FM (opt.), dual VFO's, scanning, selectable AGC and noise blanker, the IC-R71A's versatility is unmatched by any other commercial grade unit in its price range.



Keyboard Entry. ICOM introduces a unique feature to shortwave receivers...direct keyboard entry for simplified operation. Precise frequencies can be easily selected by pushing the digit keys in sequence of frequency. The frequency will be automatically entered without changing the main tuning control.

Superior Receiver Performance. Passband tuning, wide dynamic range (100dB), a deep IF notch filter, adjustable AGC (Automatic Gain Control) and a noise blanker provide easy-to-adjust clear reception even in the presence of strong interference or high noise levels. A preamplifier allows improved reception of weak signals.

32 Tunable Memories. Thirty-two tunable memories, more than any other general coverage receiver on the market, offer instant recall of your favorite frequencies. Each memory stores frequency, VFO and operating mode, and is backed by an internal lithium memory battery.

Options. FM, RC-11 wireless remote controller, synthesized voice frequency readout, IC-CK70 DC adapter for 12 volt operation, MB-12 mobile mounting bracket, two CW filters, FL32-500Hz and FL63-250Hz, and high-grade 455KHz crystal filter, FL44A.

ICOM

First in Communications

ICOM America, Inc., 2380-116th Ave NE, Bellevue, WA 98004 / 3331 Towerwood Drive, Suite 307, Dallas, TX 75234

All stated specifications are approximate and subject to change without notice or obligation. All ICOM radios significantly exceed FCC regulations limiting spurious emissions. R71A1084

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Model SRB2

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- Auto-Trak For Hands Off Operation
- Eliminates 2 Woodpeckers At Once

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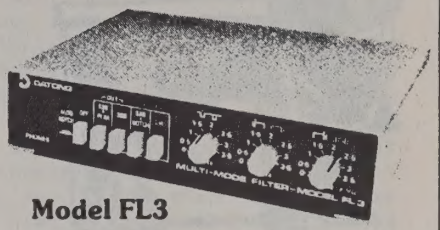
Now AllComm would like you to do just that. We want to send you a C-60 cassette with a demonstration of the DATONG products so you can hear for yourself.
We are so sure you'll like what you hear we'll give you a certificate good for $5.00 off the price of the SRB 2 & FL 3 or $2.00 off any other DATONG product that we offer.

Just send $1 for postage & handling ($1.50 or 7 IRC's for overseas) to:



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- Multi-Mode Audio Filter With Auto-Notch
- 4 Complete Filters
- Special Tuning For RTTY & CW

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Please mail to: RADIOSPORTING, Box 65, Don Mills, ON, M3C 2R6 Canada

VE3BMV RADIOTORIAL

RADIOSPORTING crew took off to some of the big and small conventions. We were in Dayton, Rochester and Guelph. It was very enlightening and beneficial for us and I hope to some of you. We cleared up some misconceptions and talked to many of you. We are grateful for your comments and suggestions. We welcome them and we want to serve you the best we can. If you have a problem or beef, please let us know. We will try to help you or write about the possible solution to the problem. Many others might be in the same situation and can benefit from it.

We found out some interesting things at these conventions: one DX type was waiting to see if we will be around for awhile; some advertisers thought that we were a Canadian magazine, while some VE types thought we were an American magazine; some leafed through the magazine and did not see the playmate of the month centerfold; some looked at it, pulled their wallet out and subscribed right on the spot. They felt they will get their money's worth. Many of our readers bought the TS-930S or 940S right there, after reading our reviews.

Those daring ones that have subscribed can see that we are still around, we are getting better and generally they find our content of great and immediate interest to them and their daily activities on the bands. We are working on improving things, situation permitting. Over the next few months we should improve our looks and expand the content. We are still looking for contributors and column leaders. Would you like to share your knowledge with others? Please come forward, we'd like to have you aboard.

This month we welcome Art, N2AU, as a leader of the DX News column. If you have any hot DX tips and news, please send them directly to Art, or catch him on 14.200 or 3.830 kHz some evenings or Sundays.

We are approaching summer and with it a slowdown in contesting activities and to some extent in DXing. Uninformed hams might think that this is the time to do the antenna work. The old contest tiger never works on the antennas when it is nice or so unbearably hot out there. He waits for the bad weather in the fall, just a few days before the contest. The antenna work is done then. It somehow doesn't feel right to go up the tower without the warm jacket on and without the windy and rainy weather. Such is the contester's life. Any exceptions out there?

Here, at 3BMV's place, things have been busy and no time to get that 3 el. 80 m monster up on the tower for the WPX CW contest. I scraped just enough time together to take the wounded 40m beam down and put up 80 m delta loop. Things are slow in the summer on 80 m anyway. Bands were in good condition and I understand that 40 m band was hot and some US stations made over 1.7 million points (good-bye record.) Interested in the low band DXing and contesting? We will specialize over the next few years on low band antennas, receiving techniques and operating tips on the pages of RADIOSPORTING. Stay tuned.

Interesting things are happening in the world of radio publishing. Wayne Green, W2NSD, has resigned from the the 73 Magazine. Most of you will probably remember Wayne as a driving force in deregulating Ham Radio down to no exams and no CW (just like CB?). My last encounter with Wayne's 73 was when he attacked the "rubbish" about the CW I wrote in the 73's DX Column. That was it! I could not agree with his views about our hobby. His departure is probably the best thing since the crystal detector. About time he left us alone! It looks like more people are of similar opinion, because the 73 was "losing weight" and good for Wayne he got his bucks out of it.

According to The DX Bulletin, a recent survey of ARRL members showed that there is too much of the contest stuff in the QST and there is some pressure to get rid of it. We hope that ARRL has noticed us and we will be more than happy to publish their unwanted contest articles in RADIOSPORTING. Some of our readers questioned the lack of material on ARRL contests. All I can say is, we publish what we get. We have asked for the results of anything to do with contesting and DXing, but so far we have only received a letter telling us we will be put on the mailing list, but nothing has arrived yet. We are pleased with the input from the Canadian sister of the ARRL - the CRRL, providing us with some news from the Canadian scene.

We are also thankful to W1WY who mentioned RADIOSPORTING in his contest column in CQ Magazine, to VE3GRO for his note in CRRL Canadian NewsFronts in QST, to WA6ITF in Westlink Report and N6JM in DX World column of Worldradio. We appreciate your kind comments and we hope that others will discover us too.

We are experiencing some problems with the mail system, both in the US and Canada. Probably the only thing that could help, is to complain to your postmaster or the head office. They keep jacking up the prices of the postage stamps, while services deteriorate. Technology is helping everybody except our postman. It takes longer for letters to get across town, and mail gets chewed up, and even eaten by the machines. No wonder all kinds of courier services are doing so well. It is perhaps time to use our radios and computers to "mail" the hot news.

The last day of May brought some terrible surprises to people of Pennsylvania, Ohio and Ontario. Powerful twisters killed over 60 people and turned towns into piles of rubble. Communications were disrupted and many hams got involved in the traffic handling and helping where possible. We heard a story where one ham's tower survived, but the house was blown away. Tremendous forces were involved, causing houses to disintegrate in seconds, leaving thousands homeless.

Have you joined the IRSA yet? Are you in support of quality operating and sportsmanship on our bands? Then please join us and help promote amateur radio as a gentleman's sport. The IRSA logo is a sign of a radioamateur, a sportsman and a gentleman. Is there a convention coming up in your area? If you are interested in promoting RADIOSPORTING and IRSA, please let us know. We will send you some material and sample issues. 73 de Yuri

DON C. WALLACE, W6AM

1898-1985

Don C. Wallace, a radio pioneer, dean of DXers, Charter Member, and Past President of the Southern California DX Club, died Saturday, May 25 in Long Beach after suffering a stroke. He was 86.

Don Wallace, W6AM, in his 86 years bridged remarkable historical periods in which his radio interests helped him to play vital roles. His power of positive thinking turned what might have been liabilities for others into assets for him.

DXing in the grand manner for the then 6OC in 1912 was from Long Beach to Piedmont, California, some 400 miles away. Even then his admiration for ling wires was evident with an antenna three blocks long, strung over two power lines on 80-foot poles! (The chief operator of the nearby Marconi station had to take turns with Don to use the airwaves.) That 1910-1916 station used a homemade receiver. Don secured copies of Armstrong's patents and a test tube and made all circuits (i.e., tuned antenna, tuned grid, tuned filament return from the grid and tuned filament return from the plate). He felt that we never have duplicated that particular type of sensitivity and care in construction. China ship stations were so loud he could hear them in the house some 60 feet away. The transmitter was comprised of a homemade transformer, rotary gap and an antenna meter (using an old alarm clock set of bearings).

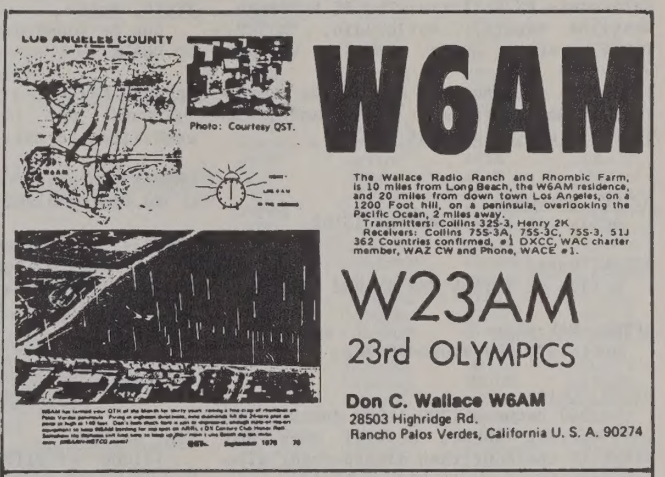
At the time of the First World War, 6OC joined the Navy and almost immediately began operating NPG in San Francisco, a fulfillment of his still-boyhood dream operating the 300-kW Bolinas Marconi transpacific station. Though still a teenager, Don was placed in charge of the 36 operators on board President Wilson's Peace Conference ship, the U.S.S. George Washington, which became a classic communications center on trips to and from France. On the staff were famous radio men of the era, such as Beverage of Beverage wire antenna fame.

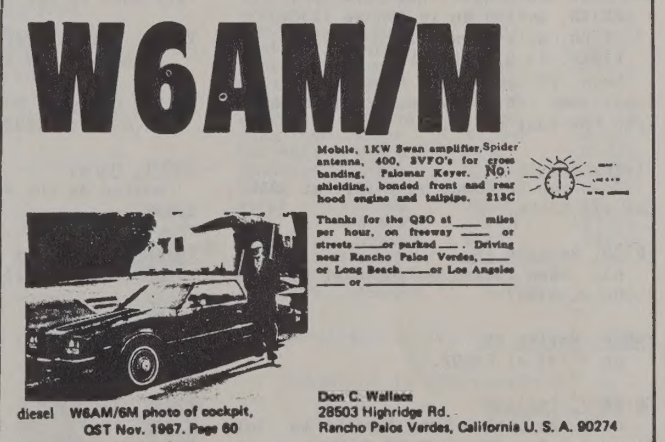
In 1922 Don held the call 9ZT in Minneapolis. His station used a water-cooled tube, tube rectifiers and a separate pole line transformer; he was heard in 16 countries. His 1923 station was awarded the Hoover Radio Cup for best in the USA. In the early 1920s 9ZT worked Leon DeLoy, 8AB (France) on 110 meters - Leon's farthest contact. When WAC was started in this period, 9ZT was one of the first four USA charter members. About that time the old Federal Radio Commission issued Don the call 9XAX "...anytime, any power, any wave length."

Always a high-speed CW operator, Don won numerous cups, plaques and awards. He helped Press Wireless locate their west coast transpacific receiving station. Later, when Press Wireless moved back to San Francisco, Don bought the 104 acre, 1234 foot high location, with antennas and buildings, on the Palos Verdes Peninsula. W6AM now had 18 rhombic directions on the remaining 24 acres.

W6AM was a well known fixture on the DXCC Honor Roll and often occupied the coveted number 1 position. Several years ago when Headquarters announced a $25 plaque for those who could demonstrate that they had at some time been in the number 1 position, Don wrote Bob White at Hq. to go ahead and send him the plaques he was entitled to and bill him later. The conservative W1CW wrote Don first and asked him if he really wanted to panel the W6AM radio room with 64 plaques at a cost of $1775! (Don settled for two representative plaques, one phone and one CW).

Don's lifelong dreams came true, and he was quoted as saying "the reality is even better than the dream." (Adapted from: Ellen White, W1YL, "W6AM - A DX Legend," How's DX?, QST Aug.1981, p.67 by So. Calif DX Club Bulletin)


LOS ANGELES COUNTY
Photo: Courtesy QST.
W6AM
The Wallace Radio Ranch and Rhombic Farm, is 10 miles from Long Beach, the W6AM residence, and 20 miles from down town Los Angeles, on a 1200 Foot hill, on a peninsula, overlooking the Pacific Ocean, 2 miles away.
Transmitters: Collins 32S-3, Henry 2K
Receivers: Collins 75S-3A, 75S-3C, 75S-3, 51J
362 Countries confirmed, #1 DXCC, WAC charter member, WAZ CW and Phone, WACE #1.
W23AM
23rd OLYMPICS
Don C. Wallace W6AM
28503 Highridge Rd.
Rancho Palos Verdes, California U. S. A. 90274


W6AM/M
Mobile. 1KW Swan amplifier, Spider antenna, 400, 2VFO's for cross banding, Palomar Keyer. No: shielding, bonded front and rear hood engine and tailpipe. 213C
Thanks for the QSO at ____ miles per hour, on freeway ____ or streets ____or parked ____. Driving near Rancho Palos Verdes, ____ or Long Beach ____or Los Angeles ____ or ____
diesel W6AM/6M photo of cockpit, QST Nov. 1967. Page 60
Don C. Wallace
28503 Highridge Rd.
Rancho Palos Verdes, California U. S. A. 90274

Here are some of the very familiar cards sent all over the world and all existing countries by Don, W6AM. According to friends, he was active until the end, having played golf and operated from his station on May 24. He suffered a stroke that day and died the next. The funeral was May 29, 1985.

DX NEWS

ART HUBERT, N2AU

The DX news from around the world as exchanged on the IRSA net and from other sources: DX Report, Frankford Radio Club, Kansas City DX Club Newsletter, LIDXA Bulletin, NCDXC CW Bulletin, South California DX Bulletin, The DX Bulletin, Westlink Report, Worldradio, DJ9ZB, F6FEE, KE2C, KG6DX, SMØAGD, VE3BMV, and VE7XR
The IRSA net operates on Sundays around 14.200 MHz, starting at 2000 Z and 3.830 (Mondays and Fridays at 0200 Z).

A22DP, Botswana
active on 14.150 kHz at 1310Z.

A71BK, Qatar
active on 14.165 kHz around 2015Z.

AP2MQ, Pakistan
on 14.180 kHz around 0230Z.

BY1PK, China
14.060 between 1200-1300Z during USSR CQM contest worked several ones and sixes in the hour then disappeared, also has been heard on 14.010 at 0145Z.
BY1YH, active on 14.196 at 1230Z.
BY5RA, active on 14.027 at 0900Z.
BYØAA, 14.010 at 0215Z.
Lots of activity from China, but conditions do not permit good openings into the East Coast.

CT2AK, Azores
John can be found on 14.015 at 0040Z; QSL via W3HNK.

FR4ZD, Reunion Is.
has been worked on the East Coast on 7.004 at 0330Z.

FW8AF, Wallis Is.
on 3.795 at 0800Z.

GØ/KØVV, England
will be active from June 15 to July 14, special prefix.

JY9WR, Jordan
worked on 14.150 at 1400Z.

KG6DX, Guam
Joel again very active in the CQ WPX CW contest on all bands. He made 1234 QSOs, 345 prefixes and netted 1,562,160 points. Condx were great the first day, while the second day the 20 m band was the best.

KH3, Johnston Island
KH9, Wake Island
operation by KB6DAW/KH2 during the month of July for about one week from each of the islands. Dates are not available yet.

OX3OA, Greenland
Op. Ole has been quite active on 40 meters, 7.003 at 0000Z.

SVØDV/9, Crete
will be active until December 1985 by WOPU.

SVØAH, Rhodes
is active, but doesn't use the /5 after his call sign.
Also K7VAY/SV5 to be active during June and July mainly on CW.

TA1D, Turkey
been active on 20 meters CW 14.022 at 0040Z also 14.007 at 2220Z. Op. Kadri QSL to Box 1167 Istanbul. He runs 70 watts into a dipole.

TU4BR, Ivory Coast
active on 14.227 at 2200Z.

TZ6FE, Mali
can be found on 14.188 at 0030Z. QSL to DL4BC.

UL7CAA, Kazakh
found on 14.022 at 0035Z when conditions permit.

UM8MAN, Kirghiz
14.010 at 0130Z.

UW3HY/1, Franz Joseph Land
Op. Valery found on 20 meters CW daily usually near 14.025; also 7.001 after 0200Z. He will be on the island for at least two more months. Valery said that working into N.A. on 80 meters almost impossible due to European QRM. 14.022 at 2000Z and 14.028 at 0030Z.

V2A, Antigua
14.006 at 2115Z also 7.003 at 1030Z. Very good CW op. QSL to W2JT.

VK9ND, Norfolk Is.
around 14.040 at 0415Z.

XU1SS, Cambodia
14.020 at 1200Z, weak CW signal.

XX9UT, Macao
worked on the West Coast on 3.760 at 1200Z.

YBØARA, Indonesia
on 14.198 at 1247Z.

YN1CC, Nicaragua
active on all bands CW. QSL to Box 2971, Managua.

Z22JS, Zimbabwe
Op. Bill can be found on low end of 40 meter CW with good signal around 0300Z. Bill is 73 years old and has been on the air since 1939. He became ZE2JS in 1948. While serving in the South African Air Force he was ZS6GZ. QSL direct to CBA.

ZC4AB, Cyprus
found on 14.220 at 2100Z

ZK2IK, Niue Is.
on 14.180 at 0330Z

3B7, St. Brandon
SMØAGD and LA7XB had to cancel their DXpedition. They were refused a landing permit for 3B7. Rumor has it that only locals (3B8's) will be allowed to operate from there.

3B9CD, Rodriguez Is.
found on 7.002 at 0315Z. QSL via 3B8CD.

3V8PS, Tunisia
on 14.183 at 1845Z.

5H3RG, Tanzania
been worked on 14.225 at 2100Z.

5T5MS, Mauritania
will be active until July 1985

5Z4MX, Kenya
active on 7.004 at 0300Z. Looks for West Coast QSO's.

7X2LS, Algeria
on 14.195 at 2340Z. Also can be found on 75 and 160 meters.

8J7ITU, Japan
special call during ITU week. QSL via Buro.

9M1MM, Nepal
Father Moran on 14.150 at 0030Z.

9Q5MA, Zaire
heard on 14.180 at 1900Z.

PACIFIC NORTHWEST DX CONVENTION
Will be held on July 26-28 at Richmond Inn, 7551 Westminster Highway, Richmond, B.C. Canada. Program includes: VE7IG - On 5BWAZ from the NW, VE7BC - China update, W6OAT - Clipperton DXpedition, NA6T and KD7P - Midway Contest operation, W6NLZ - 80m beam update. Send registration to VE7BXG, 12467 - 53rd Ave., Surrey, B.C. V3W 1A4

CLIPPERTON DX CLUB CONVENTION
For hams, DXers and contesters in Paris, France area on Saturday 21st of September 1985. Meet some well known European DXers and have a good time at this 7th International DX Convention. For more information contact Jacques Saget, F6BEE, 34 Rue Maurice Ravel, F 78690 - Les Essarts Le Roi, Tel.(3) 041.57.37

RSGB HF CONVENTION
be held on Sunday, Sept. 29 mear Oxford and will include DX and contest forums.

To make this column as informative as possible, I need input from RADIOSPORTING readers. In addition to the IRSA net frequencies and times I will also be on 14.250 MHz at 2300Z Tuesday evenings and 3.830 MHz at 0200Z Friday mornings. Also, information can be sent to me at my home address and I will reimburse your postage costs if you wish. Thank you for your help.

Arthur Hubert, N2AU
436 N. Geneva Street
Ithaca, NY 14850 USA

CYPRUS BASES - ANOTHER VIEW

A number of battered DXers, who had clawed their way to within a card or two of the Honor Roll, had it snatched away by the ZC4 ('Sovereign' British Bases on Cyprus) decision. For forty years Americans have been operating from U.S. bases in Japan and Okinawa. It is laughable to think that the British bases on Cyprus could be any more 'sovereign' than the American bases in Japan - or in a number of other countries, for that matter.

The 'KA' licensing authority is United States Forces Japan, not the Japanese government. Yet they (KA stations) count exactly the same as JA stations for DXCC. As a matter of fact, JA's were not even permitted to work KA stations, because the Japanese government considers them 'Auxiliary Military Radio Stations' rather than 'amateurs.' But they have always counted as 'hams' for DXCC purposes.

The U.S. embassy in every foreign country and every foreign embassy in the U.S. are 'extraterritorial,' that is considered the sovereign soil of the mother country, yet none count as 'countries' for DXCC.

But the DXAC is still toying with 4U1VIC, the 'Vienna International Center' (which resembles a 'UN Embassy' more than anything else) as a separate country! All of the arguments used in its favor: size (40 acres), extraterritoriality, postal services, currency, ham licensing authority, etc., are easily met by those US bases in Japan. They may be only military bases - but so are the 'Sovereign British Bases' on Cyprus. And what about the 'Sovereign Military Order of Malta'?

(K7ZR in "The DX Bulletin")

FREE WORLD MAPS

AT&T has available a very attractive multi-colored wall size world map with all time zones clearly delineated. And, in case you want to chase DX the "modern" way, listed down one side of the map border are the country calling codes for those countries you can dial direct. To get a map simply dial 1-800-874-4000. The operator will identify as 800 information, tell her you want a world dialing map; she will ask for your area code, telephone number and address. (FRC)

TO WIN A HAM RADIO CONTEST
IS TO OUTPERFORM OTHERS
WITH SOPHISTICATED METHODS

VIA 75th ANNIVERSARY AWARD

The world's first and oldest radio society, Wireless Institute of Australia, is celebrating its 75th Anniversary.

One of the many planned activities is the WIA 75 Award which will be available during the period March 1 to December 31, 1985.

To qualify, Australian radio amateurs (and shortwave listeners) need to contact (log) 75 members of the Wireless Institute of Australis. A contact will only be valid if the WIA member's individual membership number is logged.

No more than 30 WIA members may be logged in any one callsign area.

Overseas radio amateurs and shortwave listeners, including those in VK9 and VKO, can qualify in any of the following ways:

1. Contact (log) the commemorative station VK75A.

2. Contact (log) a radio amateur who has already qualified for the WIA 75 Award - and obtain during the QSO his/her Award Certificate Number.

3. Contact 75 WIA members, no more than 30 in any one callsign area, and log their WIA membership number.

Claims should include a log extract of the required contact(s), $2.00 to cover certificate, handling and postage costs, and be sent to:

WIA 75 Award Manager
Wireless Institute of Australia
412 Brunswick Street,
FITZROY 3065 VICTORIA AUSTRALIA
(WIA)

Ron Wright, ZL1AMO, who has been on many DXpeditions, has the logs for the following operations:

VR6HI	**March-April 1979**
ZK1MB	**August 1979**
ZK2EA	**August-September 1980**
A35EA	**August-September 1980, March-April 1985**
5W1CW	**August-September 1980**
H44RW	**April-May 1981**
VK4ANS/LH	**July 1981**
YJ8RW	**November-December 1981**
ZK1CQ	**August 1979, April 1982**
ZL1AMO/C	**November 1980, March-April 1983**
ZK9RW	**October 1983**
ZL8AMO	**October 1983**
ZL7AMO	**May-June 1984**
FW0BX	**October 1984**

QSL routes

A22ME	–AK1E
A22TE	–AK1E
A35EA	–ZL1AMO
AH2U	–K9XR
BV0AC	–JA9AG
C6ABA	–G3AMR
C21NI	–*(See Note 1)*
C31MD	–FE6AJA
C50RCL	–CT1ASY
GC3SAS	–VE3FOI
CN8EL	–W2PD
CO5GV	–W3HNK
CT2CB	–N2DUR
CX4GL	–*(See Note 2)*
CX5BW/D	–CX1AA
CX9AAK/D	–CX1AA
CX9AU	–CX2SA
D68AM	–WB2OHD
D68AR	–F6ACB
DJ0SB/C6A	–DJ0SB
DL7AH/3X	–DL7AH
DL7FT/SV9	–DL7FT
DP0GVN	–DJ4SO
DX1N	–JH3OII
EA9KF	–WA6OTU *(See Note 3)*
EC9FS	–EA9IB
EL1G	–WD9IDS
EM3W	–UZ3AXJ
EM4BMG	–UZ3AXJ
EM5BYY	–UB4YZZ
EM5T	–UT4UWV
EM6AAK	–UZ6AWA
EO1AOK	–UZ1OWA
EO1AZK	–UZ1ZWX
EO1AZM	–UZ1ZZZ
EO2QGL	–UQ1GQF
EO3ALS	–UZ3LWA
EO3ATD	–UZ3TWT
EO3AWK	–UZ3WWW
EO3AYB	–UZ3YWA
EO5BIM	–UB4IWA
EO5BQM	–UB4QWP
EO8M	–UM9MWA
EO9ACS	–UZ9CWW
EO9AYB	–UZ9YWA
EO0AAK	–UZ0AWB
EP2SV	–K6KM
ER3A	–UZ3AZO
EU1O	–UO1GWW
EU1Q	–UQ1GWW
EU1R	–UR1RWN
EU2P	–UP1BWW
EU5T	–RT4UW
EU6D	–UD7DWA
EV4AS	–UZ4SWM
EV4AW	–UA4WE
EV6TA	–UZ6YWJ
EV9AW	–UW9WR
EW1AA	–UZ1AWT
EW2C	–UC1AWC
EW6AA	–UZ6AWJ
EW7BF	–UB4FWW
FG0BKZ/FS7	–FE6AJA
FG0HVL	–FE6AJA
FG0HVL/FS	–FE6AJA
FG0HVM	–FE6AJA
FG0HVM/FS	–FE6AJA
FG/K2BS/FS	–W2GHK
FG/W0RLX/FS	–W0RLX
FG4CP	–FG7BT
FM4CT	–N7RO
FM5WD	–W3HNK
FM5WE	–FM7WE
FM0HVL	–FE6AJA
FM0HVM	–FE6AJA
FT8YY	–F2MO
FY0HVL	–FE6AJA
FY0HVM	–FE6AJA
GB2PX	–G3XTT
GB2SDD	–GW4HOQ
GU5CWW	–K6KM
H5AQ	–ZS6BWD
HC5EA	–K8LJG
HH2CQ	–WD4IKI
HI0B	–HI8IH
HK5ISX	–NJ5X
HK0HEU	–WB2CZB
HS4AMS	–W7PHO
HW5GE	–TK5CI
HW5LJ	–TK5UC
HW5NJ	–TK5JN
II8CS	–I8WYD
IR8CS	–I8LWL
IY4FGM	–I4IKW
J5WAD	–W6CNA
J39CM	–WB2LCH
J41SV	–SV1OI
J73D	–W2OB
J73LC	–KF4IL
J73RM	–VE3DFD
J87GL	–K0GVB
J87JCG	–KA9JCG
J87TIY	–WB9TIY
J87VV	–KB9AW
J88AQ	–W2M1G
J99A	–TI2BR
JR8BUU/5N0	–JA8FCG
JW1NQ	–DL1HH
JW5E	–LA5NM
JW0EQ	–LA5NM
K1MM/SV5	–K1MM
K4UEE/J8	–K4UEE
K5KG/VS6	–K5TU
K5LZO/KP5	–K5LZO
K5BA/KP2	–KU2Q
KA2DIV/V2A	–WB4OSN
KC6MR	–JJ1TZK
KC6MR/KX6	–JJ1TZK
KD7P/NH4	–KD7P
KD7P/KH4	–KD7P
KK9A/PJ7	–KK9A
KK9A/VP2E	–KK9A
KV4FZ	–W3HNK
N1AAX/PJ4	–K1RIF
N5CJN/5N1	–K4ZKG
NR5M/KP5	–K5LZO
OX3OA	–OZ1FAO
P29KJ	–VK9NL
P42J	–W1KDD
PT7SD	–WB8SSR
S42FXT	–VE3FXT
S8FXT	–VE3FXT
SV0AC/SV9	–WB4GCP
T30ZK	–JJ1TZK
T32AR	–W0RLX
TG9XHQ	–JA4FGD
TR8DM	–F3CY
TR8DR	–W2PD
TR8IG	–N6CW
TR8JD	–FE6AJA
TR8YL	–FE6AJA
TR0AB	–FE6AJA
TU2BR	–KN4F
TU4BR	–KN4F
V2ACW	–WB4OSN
V2AZM	–WB8SSR
VE3KFE/4U	–VE3PET
VI3XB	–VK3XB
VP2EAA	–W0RLX
VP2EAG	–KJ0D
VP2EC	–N5AU
VP2EH	–N5AU
VP2EW	–N5AU
VP2EZ	–AA4GA
VP2MP	–W2KF
VP2VEG	–W0DVZ
VP2VIP	–KP2AJ
VP5GEX	–K0GVB
VP5SBX	–KC2RS
VQ9NC	–WA4MQW
VQ9YR	–KA4SPA
VR6AB	–ZL4DW
VR6BR	–KA9W
VU2YOU	–N3US
W9NUF/PJ3	–K9QVB
WP4F	–WP4AQK
XE1FR	–W5QK
YS1UL	–WA0JYJ
YS9CHE	–WA0JYJ
YW5R	–YV5HUJ
ZC4CN	–G3SNN
ZC4CZ	–G4MGQ (or G8MWS)
ZC4RM	–G3EMY
ZC4ZN	–PA0GMM
ZF2AQ	–WA3YJA
ZF2AY	–K9LA
ZF2HI	–KZ2E
ZP5XDW	–N4DW
ZS3KL	–K1ZLA
ZS4MG/H5	–ZS4MG
ZV9ZZ	–PY5IW
1S1CK	–WB0TEC
3X0HBG	–F0GTI
4K1A	–UA3GD
4K1F	–UQ2GAG
4N4EXA	–YU4EXA
4U1ITU	–*(See Note 4)*
4X4NJ	–WA4WTG
5B4LP	–KA3FIB
5H3QM	–VE7QM
5N9GM	–I8XIU
5T5CJ	–W4BAA
5T5RY	–F6FNU
5V8WS	–DJ6QT
5W1EJ	–W0WP
5W1FC	–WA6VNR
6W1DY	–VE4SK
6W1LL	–DL1HH
6W1NQ	–DL1HH
6W2EX	–F6EYS
6Y5FS/KP1	–GW3YDX
6Y0NR/KP1	–6Y5NR
8Q7GW	–W9GW
8Q7RD	–DF2RG
8Q7YL	–JA1AEQ
9D5A	–K6KM
9H1GX	–G4WFZ
9M2HB	–N4FFN
9M6YY	–K5YY
9N1AW	–W1GAY
9N1NFO	–W1GAY
9N38	–W1GAY
9Q5CT	–AK1E
9U5JB	–ON5NT
9X5AL	–SM5IR
9X5WB	–WB6VK
9Y4F	–VE7DRV

(Worldradio)

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* COMING UP IN RADIOSPORTING: *

* CW FILTERS MOD FOR TS-930S *
* DUPE CHECKER PROGRAM *
* VE3BMV RAZOR BEAMS *
* DXING AND CONTESTING IN BULGARIA *
* AND MUCH MORE *

* HAVE YOU TOLD YOUR FRIENDS *
* ABOUT RADIOSPORTING YET? *

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1985 ST. BRANDON/3B7 DXPEDITION

Thor Rasmussen, LA7XB and Erik Sjolund, SM0AGD

Did you work a 3B7 in April of this year?
If so, forget about it. You worked a pirate...

The expeditioners were on the site but they never came on the air. We spent five days at St. Brandon impatiently waiting for a permission to operate but never got it. Pirates seldom have license problems, so while we were waiting, a group of Brandon-Slims enjoyed themselves on the bands using a variety of 3B7 callsigns.

In December, 1984 we sent applications to authorities on Mauritius asking for permission to visit and operate from Mauritius, Agalega and St. Brandon. 3B8CF, Jacky was supposed to join us. He has been operated from all the islands before and saw no reason why he shouldn't get permission again.

In March SM0AGD received a letter from Telecommunications Dept. on Mauritius saying that a provisional license was granted and should be issued after our arrival to Mauritius.

We arrived on April 7th and visited the Telecomms Office the day after. Then they would only give us 3B8 licenses. We were told that visitors are not allowed on Agalega or St. Brandon.

With help from the Swedish Consul in Port Louis we were allowed to meet the Vice Minister of Mauritius. We tried to explain all aspects of amateur radio, especially DXing, and why we came all the way just for this. He seemed to be understanding and promised to give us a reply within a few days. But days passed and we heard nothing from the authorities.

We met the skipper of an Australian yacht named AURA II. He had been to St. Brandon several times with scuba-divers of different nationalities, and he was planning a new trip with departure from Mauritius on April 21st. There was room on board also for us. We checked with the Immigrations Officers and they had no objections to our visit at St. Brandon. We thought Jacky should be able to operate as 3B7CF without involvement from the Telecomms people. But on the last day before our departure, Jacky realized that not even he was authorized to operate from 3B7 without special permission. So, he decided not to go. Thor, LA7XB and Erik, SM0AGD, went. We were still waiting for a reply from the Prime Minister's office. It might be favorable. In such a case we wanted to be somewhere near St. Brandon, ready to go ashore. But time was getting short. We had to be back at Mauritius on May 2nd, in order to catch our return flight to Europe.

NCDXF and other organizations, also private hams all over the world, sent telegrams to Mauritius asking the authorities to consider our application. Thank you everybody, it was wonderful for us to learn about your support.

We arrived at St. Brandon after 77 hours on board the yacht. We went ashore, but there was no permission waiting for us. We were able to operate from the boat /MM and got some information about a meeting in Port Louis. Hopefully we should have a reply by Friday, April 26th.

This gave us new hope. We went ashore again and installed an antenna, a vertical 18 AVT. We wanted to be operational without delay if the permission should come. But nothing was heard.

Thor was considering staying another two weeks at the island and returning on another boat should the permission come in at the last minute. But on Monday, April 29, all hope was gone. We had to return to Mauritius.

We were very disappointed but we met wonderful people at St. Brandon and made many friends among the fishermen there. We learned a lot about their life and were able to participate in the daily activities just because we didn't spend all the time at the radio.

Thank you everybody for your interest in our expedition. Sorry we couldn't make it this time. We hope we will be able to work you another time.

73 de LA7XB & SM0AGD

CANADIAN AMATEUR SUED FOR INTERFERENCE

In what is believed to be the first case of its kind in Canada, an amateur is being sued for allegedly interfering with non-radio equipment. Jack Ravenscroft, VE3SR, of Kanata, Ontario, was sued for $35,000 after a neighbor complained that Jack's 20 meter transmissions allegedly turned on a microwave oven and interfered with the operation of an electronic organ. Most amateurs believe that if this should ever happen to them, they will be adequately protected by the law. This view is naive. There is always the possibility that an unsympathetic judge, unfamiliar with appropriate precedents or with Amateur Radio, could rule against an amateur. This could lead to costly appeals and an uncertain outcome. The case was to be heard on May 3. CRRL Counsel Bob Benson, Q.C., VE2VW, has supplied legal background, and CRRL Ontario Director Ray Perrin, VE3FN, has filed an affidavit in Jack's favor and was prepared to be cross-examined on it. However, the hearing was postponed. It is very important for all of us that Jack not lose this case. That could open the way for others, anywhere in Canada, to take similar action against amateurs. However, to win this case, Jack will need several thousand dollars to cover his legal costs. Unfortunately, no Canadian amateur organization, not even CRRL, is in a position to cover such costs. But you can help. Three Ottawa amateurs headed by Ralph Cameron, VE3BBM, have started a Jack Ravenscroft RF Susceptibility Defense Fund, and they'd appreciate your check. Please send it to the fund in care of Ottawa Amateur Radio Club, Box 8873, Ottawa, Ontario K1G 3J3. (CRRL News)

LIFTING 160 m RESTRICTIONS IN CANADA

DOC has informed CRRL that an order-in-council, lifting all power restrictions on the Canadian 160-meter band, has been passed by the Privy Council and is now awaiting the signature of Communications Minister Marcel Masse. In other 160 meter news, on June 17, U.S. amateurs, who had their 160 meter power restrictions lifted last year, will be able to operate RTTY, FAX and SSTV on 160 meters.(CRRL)

NOMINATIONS FOR CRRL AMATEUR OF THE YEAR

Nominations are now open for CRRL Amateur of the Year. Send your nomination, along with supporting documentation, to CRRL by September 1. The name of winner, to be chosen by the CRRL Board, will be announced at the RSO-CRRL '85 Convention. (CRRL)

KANSAS CITY DX CLUB AT DAYTON

JOHN CHASS, WØJLC

Fun, tiring, exciting, hectic, huge, informative, advanced, relaxing, large, crowded, airy and a hundred more adjectives that come to mind to describe Dayton 1985.

Although there was the largest amount of competition at Stouffers for hospitality suites, we none-the-less still had record crowds the two nights.

The new CW pileup tape that NOSS put together and KORWL administered was the toughest yet. K3ZO and JE1JKL tied for top honors in that pact at the xend of the first night.

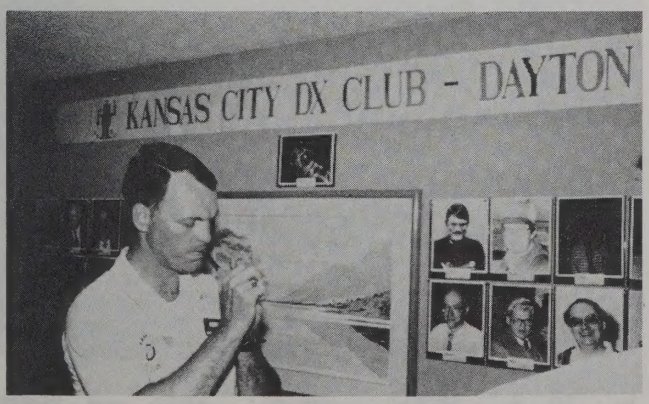
The new video "PILEUP BUSTERS" put together by ABOI and W8TN was a resounding smash. They even had hats and tee-shirts available. A ham version theme take off on Ghostbusters, Pileup Busters shows you how to get those rare ones on the first call. For those who missed it, we'll have it at the next club meeting.

The exhibit floor had many new items for all varieties of hams and some of the hottest price bidding for new product sales. Probably the most noteworthy items were (1) a new ultra small packet radio system from the TAPR group, (2) most notable for SSB DXers was Heil's new HC-4 DX cartridge and a new intriguing mike with compression, graphic equalization and a host of other features by Quatron, (3) the KC Keyer from Lance Johnson was and still is the most impressive CW keyer on the market.

The flea market had its usual array from soup to nuts and if you didn't find it...it probably wasn't made or you didn't look hard enough. The crowds, brought outside by the nice weather, just heightened the whole activity level.

For 1986, the Dayton Hamvention will have some rivalry. Evidently, the Hamfest will co-incide with the graduation ceremonies of the University of Ohio. This will put extra pressures on rooms, meeting halls, etc. The event, scheduled for April 24-26th, will be more difficult to co-ordinate. We have already contacted Stouffers for reservations. It may become necessary to book and send deposits very early for 1986. We'll keep you posted as the story unfolds.

For now we'd like to take time to thank everyone who helped make Dayton 1985 a success and a special round of thanks to the following who put out some extra effort...KBØU, KØRWL, KBØG, KMØL and KØVBU. Till Dayton 1986.... (KCDXC Newsletter)



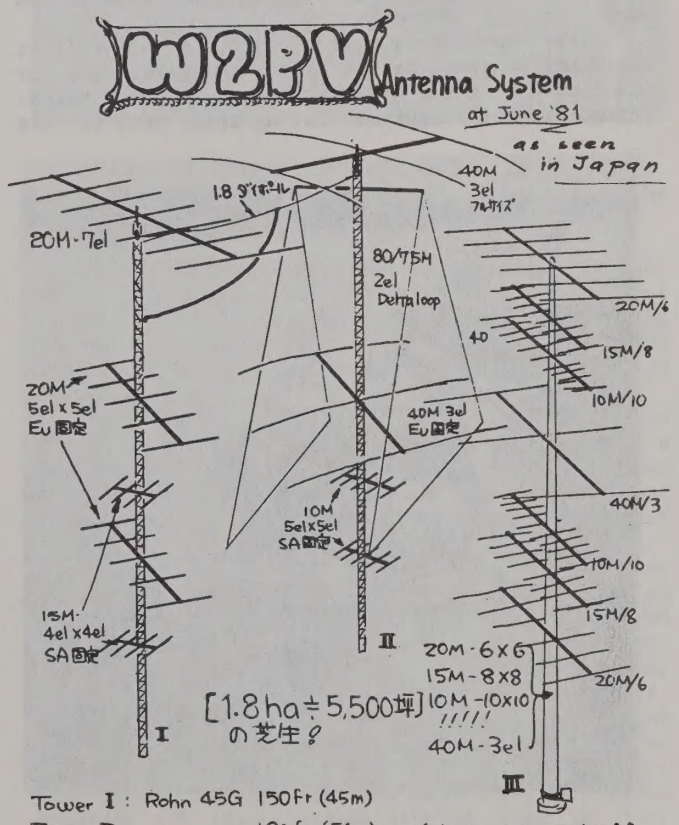
Larry Wilson, KORWL "administered" the pileup test.

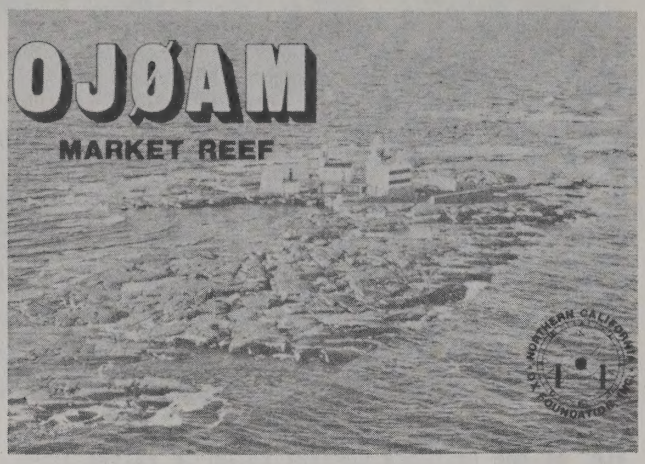
Fortunate was Jeff, N8II and those who had a "table" at the Dayton's Contest Forum CW pileup test.

RESULTS 1985 KCDX CW PILEUP TEST

SUITE:	CONTEST FORUM:
1. K3ZO	1. K3ZO
2. JE1JKL	2. K5ZD
3. W2UP	3. W3LPL
4. WØZV	4. K1VR
5. K1VR	5. K3LR
6. K5MR	6. KU8E
7. KC8C	7. K1KI
8. K1KI	8. K5MR
9. W3LPL	9. KC8C
10 WØJLC, K5ZD, N2AA	10. WØZV, K2RD

Congrats to all! (You can tell who is contesting!)





1981 MARKET REEF DXPEDITION

WAYNE GINGERICH, W6EUF

The Market Reef expedition was but a dream in 1980 when OH2BR, Jukka and OH2BAD, Miika, suggested to me that this would be a great spot for me to visit after spending four days of operation as W6EUF/OHØ on the Aland Islands.

Much discussion followed in the ensuing months on twenty meters between Finland and California. Things really started to get interesting when Martti, OH2BH, contacted Kee, OHØNA, about the possibility of an expedition to Market Reef. Kee lived for many years in the lighthouse as he and his father were both lighthouse keepers and knew all of the problems associated with getting the required permission from the Finnish Coast Guard as well as the means of getting to and landing on Market Reef.

During the early part of 1981, it seemed it would not be possible for either the permission or the trip. With Kee's persistence, in early March, things looked brighter. Having spent most of his life on Market Reef and knowing the place intimately, permission seemed to be forthcoming. In April, OH2BR and OH2BH contacted me and said it was a 'go' trip. I was ecstatic and immediately began preparing for a July trip to Finland. Transportation was not a problem as SAS Airlines has three weekly flights to Copenhagen and a connecting flight to Stockholm. My XYL, Helen has many relatives in Sweden, so the plans were made that she would spend a week in Sweden while I was on the Reef. This worked out fine and we were all set for the trip.

We arrived in Stockholm via SAS. Our very good friend Ingemar, SMODRB, was our co-pilot on the 747 and host in his home in Sweden for the two days prior to my leaving for the Aland Islands, which was the starting point for Market Reef. After putting my XYL on a plane for northern Sweden, Lars, SMOGMG, and I boarded a ferry for Mariehamn, Aland Islands. Lars would spend the night and return to Stockholm. We carried a Heath linear and TS820S transceiver with us hoping Finnish customs would not give us a bad time. Everything went smoothly and upon arriving some hours later at Mariehamn, we were met by Miika, OH2BAD, and his wife Raili. We then drove to a beautiful lakefront cottage to meet OH2BR, OH1GL, OH1XX and OH1MA who would also be going to Market Reef. After a short

The first shift of OJØMA contingent is departing Aland Islands for Market Reef.

L. to R. OH2BAD, SMØGMG, OH1GL and W6EUF arriving on Market Reef aboard OHØNA's craft.

OJØMA QTH with all the antennas in place

operation from the Aland Islands as W6EUF/OHO to shake down all the equipment, we left the next day for Market Reef. The weather was beautiful - severely clear!

We drove to the west coast of the main island of the Aland group where we were met by Kee, OH1NA, with a friend of his who was to bring Kee's boat back to the Alands after the trip to the Reef. We loaded 870 liters of gasoline, a TS820, TS830, FT107M, FT901, SB200, MLA2500, Alpha 374, TH3, 2 element quad, 14AVQ, several dipoles, 4 AC generators, 2 towers, much food, and a tiny bit of liquid refreshments and were off to Market Reef. Excitement was running high and fortunately the Baltic was not! If the seas had been rough, landing in the tiny inlet on the Reef would be impossible.

Market Reef is located approximately half way between Finland and Sweden with the center line lying on the island. It now belongs to Finland after an agreement with Sweden reached in 1984. The Reef is totally devoid of vegetation and is a large group of rocks filled with pools of water. In the winter, it is inaccessible except by helicopter. The Reef is uninhabited now, but has an automated meteorological station which sends weather data to the mainland hourly around the clock, which requires cessation of ham radio operations for 10 minutes every hour.

After some time at sea, we sighted the lighthouse and after a few more hours we arrived at the tiny natural inlet and landed with no difficulty. Unloading was done in record time and the antennas were going up rapidly. In July, daylight is a 24 hour happening, so darkness was no problem. The 80 meter dipole was the first one up and the first QSO was made with OH2BAD contacting OH2BR, his brother, who could not make the trip after a year of planning and remained on Aland Islands. Shortly thereafter, with all generators running and the towers and antennas up, all stations were going full bore.

Conditions were fantastic! USA and the world were booming in almost around the clock on 15 and 20 meters. Europe and the east coast came in on 40. Only Europe and Africa were on 80 meters. After one day, QSO's were piling up with the starting contingent sleeping very little and around-the-clock operating the rule. The original group going to the Reef consisted of OH2BAD, OH1GL, OH1MA, OHONA, OH1XX, and myself, W6EUF. On the fourth day, OH1XX and OH2BAD were to return to Aland and OH2BH, OH2BBM and SM5GMG would arrive. The departure and arrival went well and the operation was to continue for three more days. Conditions remained excellent and with the new operators, the QSO's were rapidly climbing in numbers. Our Chef and Chief Everything, Kee, OHONA, made sure that we ate extremely well and that the coffee was always ready. Kee procured all of our food for the trip.

It is time to leave. L. to R. OH1MA, OH1GL, W6EUF, OH1XX and OH2BAD. Wayne had to replace the microphone with something - canned brew.

Bathing was accomplished in the pools of sea water trapped in the rocks. They were, perfect pools, but at 50 degrees F., that was invigorating to say the least for a California native. The Baltic Sea has a very low salt content and the tide varies only an inch from high to low tide.

Lars, SMOGMG, operated on 160 meters and had fantastic results with many happy Europeans. Only a few other QSO's were accomplished on the top band as was the case on 80 meters. It was a real pleasure to see 10, 15 and 20 open around the clock to somewhere in the world, though.

After 16,000 + QSO's in seven days, the sad time of departure was near. The tiny boat was seen on the horizon and down came the antennas. I stayed with 20 meters CW until the boat pulled into the inlet and stopped operating only when someone pulled the power plug and stopped the generator. Loading the boat was done quickly and with beautiful calm seas in the very late afternoon, we were off for the Aland Islands where Kee harbors his boat. The trip home was smooth and we passed hundreds of tiny islands with no sign of life anywhere.

This trip was so well planned and prepared for

OJØMA - W6EUF at the mike working the pileups.

OH2BH and OH2KI with all the equipment ready for loading onto the boat.

by the terrific guys from Finland that we had no failures except for one rig. All antennas were tested and retested before leaving Finland and performed flawlessly. It was a highlight of my life to be invited by such a fine group of dedicated DXers and to be the first W6 to operate from Market Reef. Upon return to Mariehamn, we were invited to the monthly meeting of the OHO Radio Club. We then boarded the ship for Finland, hoping we had made many DXers happy with a new one from OJOAM, Market Reef.

It is with great thanks to the Salo, Finland, Radio Club, the Northern California DX Foundation, Kee, OHØNA, also OJØMA and the fine amateurs of Finland that made this DX expedition possible.

Wouldn't it be great to return!! (W6EUF)

Over 16.000 QSOs were made from July 13th through July 20th on all bands, 10–160 meters. Here is the crew as seen by W6EUF:

OH1GL Jukka – the quiet one who so cleverly maintained the generators and other equipment

OH1MA Jaakko – another good operator who doubled as the antenna erector

OH1XX Hannu – the dedicated CW and 80 meter expert and antenna erector

OH2BAD Miika – besides being a fine DX-peditioner, he is the expert QSL handler

OH2BBM Olli (also OHØXX) – as usual, kept everyone laughing besides working tirelessly

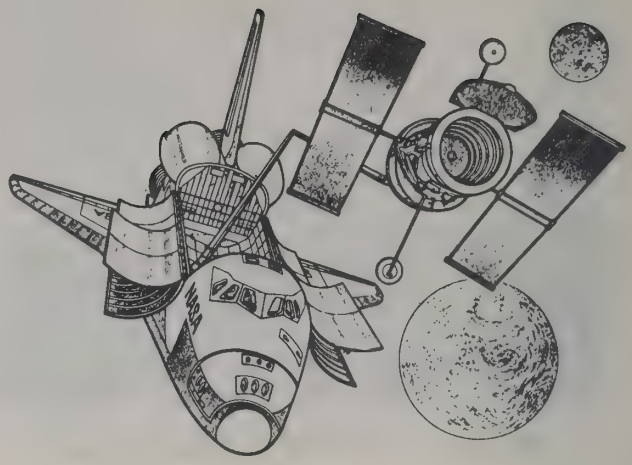
OH2BH Martti – the great arranger didn't fail this time either. The old man operated until we pulled the plug

OH2KI Jorma (also OHØXZ) – the big fisherman, but where were the fish

OHØNA Kee (also OJØMA) – the great host and chef who provided the boat, the food, the good cooking and the very good humor for the trip

SM5GMG Lars – usually sleeping, but not when 160 meters was open. Great job.

W6EUF Wayne – who once again had a wonderful time with the top DXers of the world and thanks for this expedition.



AMATEUR RADIO

FROM SPACE THIS SUMMER

Ham-in-Space planners announce that a frequency of 145.55 MHz will be the primary downlink for the Amateur station on Shuttle flight 51-F. Verbal word from NASA/Houston still sets the launch for July 15th, with the first Amateur operations coming as early as the second half of day-Two. Early transmissions from astronaut Tony England, WØORE are likely to be slow-scan television rather than 2-way voice. After day-Three chances improve for actual contacts.

The limited opportunity for 2 way contacts will be used to fulfill Tony's primary interest: Working youth groups paired with ham clubs. Local Amateur Radio clubs meeting certain guidelines will be able to get a list of special, non-published uplink frequencies to be used for this purpose. Application forms are now available for qualified groups. Requests are going to ARRL Headquarters in Newington, attention: HAM-IN-SPACE MISSION.

A hectic shuttle workload makes advance scheduling of contacts impossible. So NASA planners are agreeing to announce the status of the Amateur station one pass ahead of time. NASA ham clubs will help distribute that information as part of the long-successful effort to re-transmit shuttle talk with ground controllers. W1AW and possibly dedicated telephone numbers will be additional sources of information. (ARRL)

MAJOR YOUTH GROUP BACKS AMATEUR SPACE PROGRAM

President Reagan might play a role in this summer's Ham-In-Space project, thanks to a new relationship between the Young Astronaut Program and the League. YAP is part of the White House Office of Private Sector Initiatives. The director, Dr. Kerry Joels, is accepting an invitiation to pair chapters of young people enrolled in YAP with local ham clubs, to respond to Astronaut Tony England's goal of talking to the nation's youth. YAP is said to consist of at least 50,000 school

children enrolled in some 2,000 chapters nationwide. Dr. Joels indicates close ties with the League will bring Amateur Radio into his group's focus on space-oriented experimentation. Joels recently (May 10) met with League Development Manager Bill Lazzaro, N2CF and League PIO Paul Courson, WA3VJB to map out a strategy that hopefully will expand public awareness of Amateur Radio.

The strategy includes methods to substantially hike private sector support for the Amateur Space Program. Joels said he has found strong corporate enthusiasm for a proposed geostationary Amateur satellite, to be used primarily by pairs of YAP chapters and local ham clubs! The million dollar price of such a project could be entirely underwritten by a corporation!

But the most immediate impact of YAP's decision to work with the League on an ongoing basis will be this summer's space shuttle Challenger flight 51-F. With YAP's list of local chapters, it becomes easy for the League to match responding groups to affiliated ham clubs. They then would be given preferred uplink frequencies available only to qualified pairings. This saves the local ham club the trouble of seeking out an interested group of young people to take part.

YAP has tremendous capacity to generate publicity for its own projects as well as joint projects involving Amateur Radio. So for future shuttle missions, YAP is agreeing to help publicize NASA/ham club frequencies where shuttle communications are re-transmitted. This will undoubtedly bring in SWL and Scanner enthusiasts besides young people involved with the Young Astronaut Program. (ARRL)

SPACE SHUTTLE COMMUNICATIONS TO BE RE-TRANSMITTED

Shortwave listeners, scanner enthusiasts and Amateur radio operators will be tuning in this July when a space shuttle astronaut operates an Amateur radio station on board CHALLENGER. Plans now call for Tony England, WOORE to transmit slow-scan television pictures in an automatic mode when he's busy with shuttle experiments, and also to try and contact earthbound hams via two-way voice communications.

NASA Amateur radio clubs across the country will be providing the means we can tell which mode the space shuttle Amateur station is operating, by re-transmitting regular communications between the spacecraft and ground controllers. It will be on this channel we will be told one pass ahead of time what the status of the Amateur station is.

The NASA/Goddard Amateur Radio Club so far has the most comprehensive re-transmissions schedule proposed. Their station WA3NAN is just outside Washington in Greenbelt, Maryland. A tentative frequency list is as follows:

3.860 MHz SSB (evening/nite)
7.185 MHz SSB (daytime)
14.295 MHz SSB (continuous)
21.390 MHz SSB (as available)
147.450 MHz FM (continuous)

This VHF outlet is designed to serve 100 miles area from D.C.

The NASA/JPL Amateur Radio Club plans two outlets for retransmitted space shuttle audio. Both are metropolitan FM Amateur stations serving the Los Angeles/Pasadena region of California:
224.040 MHz FM
145.460 MHz FM

The Amateur Club at the Marshall Space Flight Center will operate a VHF station serving greater Huntsville, Alabama:
145.430 MHz FM

For those in the San Francisco Bay area, NASA/AIMS Amateur offer:
145.580 MHz FM

And many community Amateur VHF repeater stations will re-transmit space shuttle communications, on an occasional basis. All above efforts will be given test runs and/or regular service during shuttle flights between now and the July 15th Challenger 51-F.

UPDATED SHUTTLE LAUNCH DATE - NOTE CHANGE

Word from Astronaut Tony England, WØORE, moves the launch of Challenger Flight 51-F to July 12, 1985 at 4:30 pm EDT (2030 GMT). This is different from the earlier, tentative launch date of July 15th. Please update your planning accordingly.

Attached is a rough estimate of operating times, prepared May 29th by Astronaut England. A refined list is expected later.

Originally the Amateur radio on board Challenger was to have transmitted an automatic Morse code identifier at 5 words per minute. Astronaut England advises us the "WØORE/Challenger" took too long to send at that speed, so the device has been reprogrammed to send the ID at 15 wpm. This ID will be used only when automatic slow-scan television pictures are being sent. Manned operation of the Amateur station on the shuttle will include voice identification.

Updates on this mission, involving youth groups paired with local ham clubs, will be issued as details develop. Please continue to encourage ham clubs to apply for preferred uplink frequencies in attempts to communicate with WOORE during this flight. (ARRL News Release)

GREEN IS GONE

Wayne Green, W-2 "Never-say-die," has severed his formal relationship with ham radio with his resignation as editor of 73 Magazine.

In an announcement made at his 1985 Dayton Hamvention seminar, Green noted, "I have resigned as the editor of 73, and I did this because I really don't want to continue writing editorials on how bad things are and I have no good news for you. We have some areas of amateur radio that are exciting and fun, but all you have to do is look around this room and see how many people came with walkers and in wheelchairs and how few youngsters there are, and you will see what's ailing our hobby. And, if I continue writing editorials, you really would not want to read them.

"I know what needs to be done about this, but I don't know any way to make it happen. I have been going around to service clubs throughout New Hampshire and Massachusetts...and explaining to them the incredible importance of amateur radio to their state and to their country.

"I believe that the future of the electronics industry in the United States lies in the health of amateur radio and dies in the sickness of amateur radio, and we have a very, very sick hobby." No successor has been named to Green's editorial post. (Westlink Report)

WØORE/SHUTTLE SCHEDULE

GMT = MET (Mission Elapsed Time) + 2030

MET

Rev 47 2/22:00 - 22:30
E. U.S., England, Europe
mode: TV + Voice

48 2/23:30 - 3/00:10
Mid U.S., England, Europe
mode: TV

49 3/1:20 - 3/2:00
SW + Mid U.S., E. Canada
mode: Voice + TV

50 3/2:45 - 3:45
Hawaii, NW U.S., Canada, W. + So Africa
mode: TV

51 3/4:20 - 5:00
Hawaii, NW U.S., Canada, New England
mode: TV

52 3/5:50 - 6:30
Guam, NW U.S., N, Central + E. U.S.
mode: TV

Rev 66 4/3:20 - 4/3:50
Hawaii, W. U.S., Central Canada, E. U.
mode: TV

67 4/5:15 - 4/5:35
NW U.S. + Canada, C. U.S., E. U.S.
mode: TV

68 4/6:45 - 4/7:00
NW U.S., C. U.S., Texas + Gulf
mode: TV

69 4/8:05 - 8:35
Japan, Aleutians, W. coast U.S.
mode: TV

78 4/21:50 - 4/22:25
E. coast U.S., England, Europe
mode: TV

79 4/23:25 - 4/23:55
Texas, C. U.S., NE U.S., England, S. Europe
mode: TV + Voice

Rev 53 3/7:25 - 8:05
Guam, NW U.S., W. U.S., Texas
mode: TV

54 3/9:00 - 9:30
Japan, Aleutians, W. Coast U.S.
mode: TV

62 3/21:30 - 21:50
England, Europe
mode: TV

63 3/22:55 - 24:00
Gulf coast, E. U.S., England, Europe
mode: TV

64 4/00:25 - 1:00
SW U.S., Central, NE U.S.
mode: TV

65 4/1:50 - 4/2:20
Hawaii, W. U.S., E. Canada, NE U.S.
mode: TV

Rev 80 5/1:00 - 5/1:15
SW U.S., C. U.S., NE U.S.
mode: TV

81 5/2:25 - 2:55
Hawaii, NW U.S., Canada, NE U.S.
mode: TV

82 5/4:10 - 5/4:25
NW U.S., N. Central U.S., NE U.S.
mode: TV

83 5/5:25 - 5:35 - Guam - CW
5/5:45 - 6:00
NE U.S., C. U.S., SE U.S.
mode: TV

84 5/7:40 - 8:15
Japan, Aleutians, W. U.S., Texas
mode: TV

85 5/8:40 - 5/9:15
Japan, Aleutians, W. coast U.S.
mode: TV

Rev 93 5/21:00 - 5/21:30
E. coast U.S., England, Europe
mode: TV, Possible Voice

94 5/22:25 - 5/22:55
Hawaii, NW U.S., C. U.S., Canada, NE U.S.
mode: TV

95 6/00:00 - 6/00:20
SW U.S., C. U.S., NE U.S., Canada
mode: TV + Voice

96 6/01:25 - 6/01:55
Hawaii, NW U.S., N. Central U.S., NE U.S.
mode: TV

97 6/03:00 - 6/03:30
Hawaii, NW U.S., N. U.S. + Canada, NE U.S.
mode: TV

98 6/04:45 - 6/05:00
NW U.S., N Central U.S., E. U.S.
mode: TV

Rev 99 6/06:05 - 6/06:50
Guam, Japan, Aleutians, NW U.S., C. U.S.
Texas
mode: TV

100 6/07:40 - 6/08:00
Japan, Aleutians, W. coast U.S.
mode: TV

HERE'S THE BEEF

C.W. Bug, NØ/FØOL

To beef, or not to beef? That is the question! We do not beef if all is O.K. We beef if something bothers us. If something bothers us, it is best to get it all out. It helps you and helps others. It gets the big boulder off your hairy chest, and others will say: "Hey, I have the same problem, I am not alone!"

Now with low bands coming to life with dying sunspots, more and more hams are tuning their dials way below the 14 MHz. When one lands on 3.8 MHz, he discovers the world of radio machos. They are loud and they talk strangely. It makes your hair stand up (even the one long gone) and you stare at your dial in disbelief. Is that an amateur station? Yes it is and not the only one. Are these "hams" licensed to kill amateur radio? It makes you sick. Some unsuspecting and brave soul might say something to them, but gets chewed out and is sorry and puzzled for the rest of his life. Can the FCC do something about this? I hope so. This stuff does not belong on amateur bands and one can only feel sorry for the lack of the gray matter in those "amateurs'" hollow skulls.

Another problem, especially noticeable on 80 meters, is the "Alligator Syndrome." The alligator is an animal with a big mouth and no ears. It is unclear as to how much of a brain it possesses. Probably not much. Mother nature helps animal species to adapt to the environment. If one uses its mouth alot, it gets bigger. If one does not use its ears, they get smaller. The result is a perfect alligator - a really big mouth and hardly any ears. There are two species swimming in amateur waters: Alligator Callingus and Alligator Talkus.

The Alligator Callingus (AC) is mainly known to look for his victims around 3.8 DX pond. He would wait for his pray. The weaker and more inexperienced the little DX animal is, the bigger treat he is. If the AC finds such a poor soul calling CQ, he will carefully tune him in. He sometimes waits for the DX to finish calling, and sometimes not. He puts on his big alpha boots, opens his mouth and the roar is heard across the continents. And is heard, and heard, and heard. There is no end to it. He wants to be the last one who calls. His good reason is that when the others get tired and quit calling, his majestic roar will be heard, and the poor DX squeak will come back to him. He sometimes comes back, if he did not retire in the meantime. This encourages other alligators to roar louder and longer. The result is a real jungle out there where nobody can hear anything except one big roar. Some alligators get deaf from their own roar because, when the DX comes back to them, they don't even hear him and keep roaring until they lose their voice or blow a fuse. Some alligators will scream their brains out until nothing is left. You can tell those by the fact that when the little DX animal says: "number four alligator only!" some number one alligators call because they are number one and some number five or higher alligators call because they are higher than four. So the whole alligator farm calls and who cares that the poor DX squeak is trying to answer someone. He usually gets frightened and goes back to mama leaving the alligators roaring. Scientists from all over the world are trying to study this phenomena. They are even putting a Ham in the space shuttle, in order to figure out what makes these alligators tick and how to cure them. The only possible solution seems to be a brain transplant.

The Alligator Talkus (AT) enjoys the quiet waters of any pond. He likes to talk and hardly ever listens. He talks alot about nothing. He usually looks for the same breed of alligators because they don't understand each other best. Each one of them engages in a "conversation" by talking about the latest unimportant thing. They do alot of talking but no listening. Who cares about the other alligator's problems when you have your own? To make sure other alligators hear them well they all wear alpha boots, even if their buddy is next door to them. They have to make sure he hears them.

The low band pond is wonderful. You can hear all of the alligators from here to the ocean and beyond because you can't skip over them and they know it. These creatures don't care what their fellow hams think about them. "Nobody knows them" - just their callsigns.

A True Blue Ham is not like those alligators. He listens, he observes and he learns. It is a pleasure to hear hams working a pileup. They make one or two calls and then listen. The DX station comes back to, let's say, "4 Papa Zulu" they all wait quietly until he works that something 4PZ. He does it quickly so that the next one can get through. He does not try to convince everybody that the DX station didn't get it right, that it is me - 7 Whiskey Charlie. The real hams are all disciplined, because they know that the whole world can hear them. They are proud of their call signs and do not want to be looked upon at as alligators. Many stations get through quickly. Everyone enjoys it. A really clever DX station would split the frequency to avoid being clobbered on its own frequency. This speeds things up considerably. The true gentlemen hams realize that they are a representatives of their own countries and cultures and are proud of it.

Where do you fit in? On the alligator farm or the ham bands? You have to make that choice. We will find out in the next pileup!

On the technical side of things: Did you put up a Telrex 40 m beam lately? How long did it take before the pieces started to come down? Apparently some 40 meter monobanders have a nasty habit of getting resonant on sound frequencies - they vibrate. Putting a quarter inch rope inside the elements does not help much. The vibration shows up as the gradual self destruction of the beam. On some antennas the elements break off from the fatigue. On others, the element going through the boom slowly starts chewing away the boom and enlarges the hole in it. The result is a floppy element. If you hear your beam "singing", fix it: break the resonance, change the guying on the boom, try a different rope in the elements, anything to stop the vibrations.

See you later alligator!

73 de Clara, NØ/FØOL

(Clara likes French onion soup, she lives in Missouri, but she is not OK in the Call Book.)

ARRL DX CW FROM HONDURAS

DAVE PRUETT, K8CC, HR1DAP

Is there a DX contester on the face of this earth who hasn't sat in a Caribbean pileup and momentarily dreamed of being at the other end? The 1984 ARRL DX CW Contest was my opportunity to sample 'the good life' where the runs (hopefully) never go dry. My brother Tom, WB8VMN/HR1, was getting married in Tegucigalpa on the Saturday before the contest, so it seemed like the perfect chance to hang around for a week and be DX. The Honduran government will not issue a HR call to non-residents, so I expected to be K8CC/HR1, as I was on my last trip down there in 1979. However, Tom managed to get Hondutel (the Honduran FCC) to grant me a two week license as HR1DAP. With a regular call in use, the trip was definitely ON!

Preparations started with the purchase of a used FT107M XCVR to take along since I didn't cherish the thought of hand carrying a C-Line for a day of traveling on three airline flights. My passport was renewed, and $500 purchased a round trip airplane ticket. I packed my trusty 1976 vintage Accu-memory keyer and paddle, a digital clock, headphones and plenty of log sheets. I took along wire and antenna parts to make low-band antennas, but I wasn't sure what could be implemented until I saw Tom's yard.

My parents had gone down three days earlier to help with the wedding preparations. I traveled alone, my trusty FT107M under one arm, the other carrying a garment bag with my wedding clothes, film and other wedding necessities which could not be risked to the airlines. This was a wise precaution since one of my suitcases didn't arrive for three days. Detroit to Atlanta on Eastern and get off. Atlanta to New Orleans on Eastern and get off. In New Orleans, my garment bag broke while I was doing my best "O. J. Simpson" act, running from one end of the airport to the other. Finally, TAN Airlines from New Orleans to V3-land, and at last to HR1. We arrived late, 15 minutes before nightfall - had it been dark, we would have been diverted to YS1 since Tegucigalpa has no ILS or runway lights. What fun!

Tom's wedding was the next day, the Saturday before the contest. Everything went as planned, but punctuality is not in the Honduran vocabulary. Forty-five minutes before the wedding, the bride was at the hairdressers and her dress was ten miles away. They came down the aisle forty-five minutes late, but that was OK since guests were still arriving anyway. Two receptions (one Spanish, one English), then the bride and groom were off for a three day honeymoon.

My next three days were spent reconnoitering the backyard, which measured about 30 feet by 30 feet. Tom had a 40 foot tower with rotary Classic 36 on top. On my 1979 trip, I had left behind a 40 M dipole and 100 feet of RG58. These items were located and in short order I had a 40 M quarter wave sloper from the tower top. It tuned up OK, and I spent that evening on 40 M CW signing WB8VMN/HR1 since my license wasn't valid until the following day. Flushed with success, the next morning I added a 40 M Unadilla trap and the remaining wire to make the antenna an 80/40 sloper. This combination also tuned up OK, and I was beginning to believe that we might be ready.

On Wednesday, Tom and his wife returned and my parents were put on a plane for home. The next day, we wired up his L4B to the 220 VAC service. With the FT107 driving it in the CW position, the amplifier ran cool and delivered 800 reliable watts to the antenna. The last remaining project and major unknown was a 160 meter antenna.

On Friday, the morning of the contest, local circumstances required that I be awake at 1200Z - I would have preferred to have slept much of that day to get ready for the marathon. I managed to get the shunt-feed system installed on the tower as outlined in the April 1984 MRRC 'FLASH'. It tuned up nicely but I had no idea how well it would work with no radials and only a single 4 foot ground rod. Also, the L4B doesn't work on 160, so I was barefoot on that band.

It's 2300Z and I'm on 20 m CW running guys and getting warmed up. There's Dan N8DCJ over at 8P6G, saying that I had better work hard because he's gonna win - just who does this guy think he is? It's 0000Z and here we go - W5FO 599 KW - the first ten minutes produces 32 QSO's - WOW, is this fun! The first hour on 20 m is 171 QSOs, and the pile dried up once or twice. The next hour is 151, then 144 with a band change to 40 m. That little sloper really works - I pick my spot and take off. The first full hour on 40 is another 144, then 120 and 126. It's amazing how many CQs you have to call and still turn in two per minute. 8P6G opens up on me and refuses to go away (at least people are still calling me) but he eventually leaves. At 0600Z it's time to see how well the 160 m antenna works.

160 is reasonably quiet, but not much going on. Drop the L4B off-line and try a CQ - no answer. Another, no answer. Oh no, without a reasonable 160 multiplier I'm gonna get beat bad. One more CQ - aah, there's N4IN calling from FL, then GA and TX - at least I'll have three multipliers. Then W3BGN calls in and he must have put me out on 2 M FM because it all breaks loose: KN3O, W3LPL, K3ZUF and AA1K/3 in DE along with KS8S (who?) for QSO #10. Then the W1s and W2s start and I begin to believe the antenna might actually work. The entire 06Z hour is spent on 160 which only produced 34 QSOs, but 16 multipliers including almost all of W1, W2 and W3.

I decide to stay up all night. The adrenalin is pumping and I'm not sleepy. Up to 80 meters at 07Z. First hour 92, then 114 between 80 and 40 and its back to 160. The 09Z hour only produces 24 QSOs, but ten more multipliers which I'm grateful for. I decided to spend shorter times at the beginning of the hour on 160, then finish the hour on 80. This works well and I move N8II, and N4KG and N5DX to 160 for three more multipliers. I finish the first night with 85 QSOs and 29 multipliers on that band with which I am pleased.

12Z and its time to follow the MUF upwards. The night-time rates are all in the 80 to 90 range, due to all that slow 160 time. I work my way up through 80 and 40. Each runs well for a few minutes, then the customers go away and I reach for the band

switch. The 13Z hour on 20 m produces 122 QSOs. That's more like it. 15 m starts at 14 Z, a 110 hour then 127 and 140. I hit 10 meters at 1643Z. The next 17 minutes nets 53 QSOs. Hot dog! The 17Z hour is 162, then 146 and it is apparent the band is only open south.

In the 19Z hour the FT107M develops a problem. The rig would go to transmit but there is no drive on the ALC meter and no output. Pounding on the rig sometimes helps, but the rate drops to 99 for that hour while I operate and troubleshoot at the same time. I take the top cover off the rig and it seems to settle down but the problem is intermittent all weekend. 21 and 22Z produce 139 and 133 hours on 15 M, 20 m is good at 23Z and I finish the first day with 2800 QSOs.

I have been awake for 36 hours straight and at the radio for 24, save for brief sandwich jaunts and bathroom runs. 20 m dries up earlier than the first night so it's down to 40 m. I must be more tired than I think, because I can tell my sending is getting sloppy. I made the mistake of not using my memory keyer more the first day and now my fist aches like crazy. Everyone who asks for a sked is told that 05Z will be 80 m and 06Z will be 160 m. I hope to survive that long. At 05Z, I stop for a sandwich. I feel like a zombie.

Back to the radio and I get a really big pileup going on 80 m. I can tell stations are calling long and I must be hard to hear. The pile dries up about 0545Z, so I go to 160 m early. One CQ and WHAM! 40 minutes produces 34 QSOs and the 33rd multiplier. I hear a well known amateur who I know cheats on DXCC and runs a pair of 4-1000s. I deliberately ignore his calls. Finally, at 0625Z my brain gives out. I give the radio a loud raspberry and shut it off with the pack still calling.

Seven hours later and I awake to daylight. It's past 1300Z as I struggle to escape my coma and stumble to the radio. 20 m is empty so I start on 15 m. Oh-oh, the Europeans are louder than USA and the Ws must have their beams aimed NE. Every 200W station in Europe would rather work HR1 than W. A pity this isn't CQWW. I QSY to 10 m hoping to escape from Europeans and gain some attention, but the same reception awaits me there. The rate hovers between 80 and 90 until Europe dies around 1800Z. From then on its between 110 to 120 for a couple of hours on 10 m, then it's follow the MUF down again.

2200Z and the end is in sight. I've asked a couple of Dakotas to look for me but only one shows. Thirty minutes left and 20 m goes dry. QSY to 40 m, lots of stations but I guess everyone has worked me. W5XZ asks for a last minute sked on 160 - it's a multiplier for me too, and we work at 2358Z. Then, after 4361 QSOs, it's over!!!

I don't feel too bad. 3830 is a mess, and the Caribbean guys that I want to compare scores with don't show up. Tom and his wife want me to go to see 'Raiders of the Lost Ark' - you gotta be kidding!

The next day it's up at 1130Z for the trip from TG9 to VP1 and finally New Orleans. I scan the logs for multipliers on the plane. I spend the afternoon with W5XZ, then it's Delta to Cincinnati and finally Detroit and home.

In the following months, after the duping and dust had settled, the results showed that I had won! The expense and effort (and Montezuma's revenge) were worth it. The number one single op score in the world in the 1984 ARRL CW DX Test. Now I have a wonderful memory to recall while I sit in those Caribbean pileups... (MRRC 'FLASH')

DAYTON: A SMASHING SUCCESS

BOB McKAY, N8ADA

The 1985 Dayton Hamvention was another record breaker. The "largest and best" in every way is the only terminology applicable to describe this year's event, held the weekend of April 26-28 at the Hara Arena in Dayton, Ohio. Favorable weather, more commercial displays and dealers, a greater number of forums and a truly gigantic flea market combined to bring a record crowd through the entryway. In addition to paid attendance, another 2,000 can be added to the roles as dealers, sales personnel and forum speakers. By noon Saturday, some dealers were totally sold-out on the more popular items with signs posted stating: "Orders taken today will be shipped from our store on Monday at Hamvention Prices!"

Over 150 speakers made 36 forums and seminar sessions an interesting, as well as educational, experience for many of the convention attendees. A sell-out crowd enjoyed the Grand Banquet on Saturday evening where it was entertained by world renowned humorist and actor Jean Shepherd, K2ORS.

A record $42,000 in door prizes was awarded to ticket holders. Prizes ranged from complete stations to magazine subscriptions, and everything in between. Icom led the list of major contributors with more than $9,000 in donated prizes. The top three winners were: a complete Icom 751 station with accessories to K9IOW, a Kenwood TS-940S to WA9YSB, and an Icom 751 transceiver to WA9KNP. A complete Kenwood TS-430S station with accessories was the main Banquet prize and was awarded to KA8NRC. (Westlink Report)

SPECIAL PREFIX FOR AUSTRALIA

All Australian radio amateurs will be able to use the alternative prefix of Victor India from June 1, to December 31, to celebrate the Wireless Institute of Australia's 75th Anniversary.

The WIA is the world's first and oldest national radio society, having been founded in 1910. This will be the first time VI has been available for use throughtout VK - although the prefix was used for a short period for a local event in VK3.

The WIA is encouraging radio amateurs to only use VI if they intend to QSL with a card bearing the prefix.

A commemorative callsign VK75A will also be on air until December, and will be looking for DX contacts.

The prefix VK75 with the suffix a single letter A - is authorized for use throughout the Commonwealth fo Australia.

QSL information is via the VK3 bureau, or direct cards can be sent to VK3WI QTH. (WIA)

CANADIAN SPECIAL PREFIXES COMMITTEE

DOC has accepted a CRRL proposal that a committee of amateurs, to be named by CRRL and CARF, review all applications for special prefixes before they are issued by DOC. CRRL will be contacting CARF about this matter soon. The committee will likely have 4-6 members and should be operational by September. (CRRL News)

MAD RIVER HISTORY

JIM STAHL, K8MR

In the beginning there was the Potomac Valley Radio Club and the Frankfort Radio Club. In the contests they would go head to head, and when it was all over, they would congratulate each other and say it was good.

Over the years FRC drifted away from the domestic contests and toward the DX contests. Murphy's Mauraders was born and took on the job of providing competition for the PVRC. It was still simple, and it was good.

In the spring of 1970, at the urging of people from the other side of the country, the ARRL Board of Directors voted to extend the limits for club territories to 175 miles. The Atlantic Division Director was not sure this was a good idea, and asked to be recorded as voting against it. The July 1970 issue of QST announced this change, with the Operating News column including examples such as "a New York City club covering from Baltimore to Boston."

Living in the Center of Ohio was Dick Bennett, K8EHU. He looked at what such a radius would cover in his neighborhood. He also asked how much area might be covered by careful location of the center of this 175 mile radius circle. With a circular paper cutout and a Gulf road map he discovered that it could cover such cities as Detroit, Indianapolis, Louisville, Cincinnati, Pittsburgh and Cleveland.

At Dayton in April 1971 K8EHU approached various big guns about forming a club covering such an area. On Saturday morning, April 24, 1971, a group of a dozen or so contesters ate breakfast at the VJ Pancake House across the street from the Dayton Sheraton (later the Biltmore Towers), which was the downtown Hamfest hotel in those days. Over pancakes and eggs the contesters decided to go for it with the proposed club. Naturally the question arose of what to call the club. The Ohio-Michigan-Indiana-Kentucky-West Virginia-Pennsylvania-Ontario Contest Club somehow didn't make it. Where again was the club center? No, the Wapakoneta Radio Club wouldn't do either. What's this river shown running through western Ohio? The Mad River? Sold! The group also decided to make the 1971 Sweepstakes their first serious contest effort, elected K8EHU the "Big Fish", and then left to go forth, multiply and search for flea market bargains.

The first club membership list in the second issue of the 'FLASH' listed 36 members, including (with today's calls) N4AR, K5TM, K7GM, K7NHV, KU7U, N8AA, K8BPX, K8EHU, WB8EUN, K8IA, W8KIC, K8MR, K8NZ, WA8TBQ, W8WPC, WA8YVR, KN8Z. Each subsequent issue of the 'FLASH' listed more new members. The weekly net on 75 meters was bustling with activity. By SS time the club roster had grown to 154 members. Needless to say, on the SS weekends the bands were filled with the sounds of "Go Mad River" as the members greeted each other. Naturally all this caught the attention of the PVRC and Murphy's. When the SS dust settled, it was a close finish, with MRRC out in front. As the 'FLASH' put it: "The SS results have not been taken well on the East Coast, especially by many of Murphy's members. It is also reported that many PVRC members do not like our victory, but, they have generally accepted the situation like the sportsmen and gentlemen they long have been respected for. On the other hand, some of Murphy's members are very bitter and are acting very frustrated. However, we have expected this reaction."

Murphy's did protest. The SS results were published in the May 1972 QST: Mad River was first with 9,960,874 and 174 entries, with K7NHV operating W8SH, winning both modes; PVRC took second with 8.79 meg and 133 entries, and Murphy's third with 7.36 meg and 116 entries. The Mad River listing included the famous asterisk, with the footnote saying the validity of the entry was in question and would be determined later. There was much haggling back and forth with ARRL Headquarters over whether certain MRRC members were indeed within the 175 mile radius, and whether the MRRC needed to have any in person meetings at all (the rules said nothing on this topic.) A QST "Stray" in the June issue announced that MRRC had been disqualified, and that the club gavel went to the PVRC. Today it rests at the QTH of W3LPL.

At a Mad River dinner that spring at Dayton, ARRL President W2HD appeared to attempt to soothe the feelings and managed to give one of the better foot-in-mouth performances of recent times. He told us that as an experienced contester, he knew that "when Murphy strikes, Murphy strikes hard." We already knew.

MRRC submitted a much smaller entry for the 1972 SS, but it was ignored. No specific rules for clubs were adopted until 1974 when the present four in-person meeting rule was instituted. By 1975 the MRRC concept was again bubbling up, based around the idea of holding the four meetings at popular hamfests around the MRRC territory. Prompted by K8MR and K8NZ, a reorganization meeting was held at an ARRL division convention in October 1975. By Dayton time in 1976 the club was back in full swing. K8NZ was elected Big Fish, succeeding founder K8EHU, who was keeping himself busy enough with night time law school. The 1976 SS entry was accepted with no problems at ARRL, taking fourth place with 42 entries and 3.7 meg. The 1977 ARRL DX test was the first DX effort. MRRC was by now off and running, quickly becoming an active force in the contests, a legitimate contender for club awards, and frequent contest/DXpeditioners.

(The MRRC FLASH)

Steve Bolia, N8BJQ (left) presenting Stu, H44R with trophy at the Hamvention Contest Forum.

IRI REVIEWS KENWOOD TS-940S-AT

Kenwood's new top of the line TS-940S was announced during the month of March in most amateur radio journals.

So what is the difference between the TS-940S and TS-930S? We will try to show the differences in our chart as far as specifications and features are concerned. Looking back through our servicing files and IRI Kenwood Newsletters regarding the 930S, we found that Kenwood has indeed addressed a lot of the 930S potential problem areas. For example, the PA board in the final unit was changed in the 940S to a glass epoxy board. The 930S used a phenolic printed circuit board. This change should eliminate intermittent PA problems. The fans were totally redesigned and so was the PA heat sink cooling system. The 940S is rated key down 100 W output continuously for one hour. The digital readout is now switchable between 10 Hz and 100 Hz resolution with a switch under the sliding top hatch door of the 940S. The main power transformer has been encased in a metal shield. Epoxy has been poured into the shield completely encapsulating the laminations of the transformer. Some users have mentioned to us that the transformer in the 930S vibrated or buzzed in a quiet environment. The epoxy should eliminate this problem. The TS-930S was not capable of driving the SM-220 in PAN display mode and there was no BS-8 output.

The TS-940S has two IF output jacks, one for SM-220 BS-8 output and the other for the output of the receive IF. The 930S did not have FM mode nor did it have a squelch. The 940S offers an all-mode squelch and FM operation built-in. The 930S automatic antenna tuner would not function outside the ham bands. The new TS-940S will operate outside the ham bands in a normal fashion if the MARS all-band transmit modification is initiated. The 930S had 8 extra memories and with modification could

	TS-930-S	TS-940S
Size:	374mm W, 141mm H, 350mm D	401mm W, 141mm H, 350mm D. With projections: 409mm W, 154mm H, 420mm D.
Weight:	18.5 kg, 40.8 lbs. with antenna tuner. without antenna tuner, 16.8 kg, 37.0 lbs.	With antenna tuner, approximately 20 kg, 44 lbs. Without antenna tuner, 18.5 kg, approximately 39 lbs.
The range of both units is the same:	150 kHz through 30 MHz	
Mode:	USB, LSB, CW, FSK, AM	Same but also includes FM.
Antenna Tuner:	Covers 20 through 150 ohms.	Same except antenna tuner will tune from 1.8 to 30 MHz continuously after the MARS mod is made.
	TRANSMITTER	
	SSB, CW, FSK, 250 W; AM 80 W	Final power input 250 W 160 through 15 meter bands in SSB, CW, FSK, FM. 140 W 10 meter band in SSB, CW, FSK, FM. 140 W in AM.
Frequency Shift:	170 Hz	170 Hz shift. Note on the PLL Unit Board there is a jumper for 170, 425 or 850 shift.
	RECEIVER	
	1.30 MHz .25 microvolts for SSB, CW and FSK	1.8 MHz to 30 MHz 10 dB signal and noise ratio .2 microvolts or less in SSB, CW, FSK. FM sensitivity 12 dB SINAD (.5 microvolts or less in FM.) Squelch Sensitivity .32 microvolts or less.
	SELECTIVITY	
	2.7 KHz minus 6 dB, 4.0 KHz minus 60 dB.	SSB, CW, AM (N FSK) 2.4 kHz or more minus 6 dB, 3.6 kHz or less minus 60 dB. FM Selectivity - 12 kHz or more minus 6 dB, 24 kHz or less 60 dB.
	CW VBT	
	Without additional filters, 600 Hz to 2.7 kHz at minues 6 dB.	600 Hz to minus 2.4 kHz variable continuously.
	FREQUENCY STABILITY	
	Within + - 200 Hz after turned on, within 300 Hz any 30" period thereafter at constant temperature.	+ - 10 X 10 $^{-6}$ (0° through +50° C).

provide 16 memories. The 940S contains 40 memory channels which also store MODE information. The 930S memory could not be scanned without doing some internal modifications. The 940S has a built-in memory scan feature. The 930S did not have programmable band scan capability. The 940S does provide band scan between two limits that are set in memory channel 9 and 0. The 930S did not have direct frequency entry and all frequency changes were done from the main tuning dial or VFO memory. The 940S has direct frequency keyboard entry. For example, depressing the ENTER button, then numbers 1 and 4, and ENTER again, would provide the 14.000.00 MHz band immediately, or any other desired frequency in the range of the radio. The TS-940S incorporates large LCD sub-display, which displays one at a time (A) CW VBT, (B) SLOPE TUNING control settings, (C) VFO A and VFO B mode, (D) Information in memories, (E) Antenna Tuner information, (F) Current time and preset times that would turn radio on and off. Two lithium back-up batteries retain memory for five years and the clock timer for three years. The 940S also offers a change of the analog scale. That is the main large fluorescent red tuning scale from 1 MHz to 100 kHz. For example, on the TS-930S, a frequency readout of 14.250.0 would find the small red cursor set at the 240 position of the sub-scale. On the 940, switching the scale switch (under top hatch cover) from 1 MHz to 100 kHz causes the marker to shift to 500 index point on the red cursor marker. In the 100 kHz position, the scale covered would be 14200 kHz to 14300.

940S is available with an optional voice synthesizer unit, the VS-1. The VS-1 announces the operating frequency on demand by depressing the front panel voice button. The optional VS-1 is installed within the 940S cabinet. This option was not available for the TS-930S. Also featured on the 940S is the ability of the antenna tuner to function in any mode. The 930S antenna tuner functioned only in the tune mode. The 940S antenna tuner operation is different than the 930S and operates as follows:

To tune the internal antenna tuner automatically, one must first depress the AUTO THROUGH button initiating the antenna tuning function. Next, the blue AT.T antenna tuning button is depressed. This must be done within a specified period of time. Next, the SEND switch is depressed. The TS-940S will automatically tune regardless of the mode that you are in for the lowest SWR. After the tuning is completed, the green sub-display will indicate "Tuning Finished - Transmitter ready". All that need be done next is to release the Send-Receive Switch and you are tuned up for that transmit frequency. It should be pointed out that neither the 930S nor 940S antenna tuner is in circuit during RECEIVE mode, only during TRANSMIT mode. The TS-930S power output was adjustable only in CW FSK AM mode but not side band. The TS-940S power output is adjustable in any mode of operation with the power control knob.

The TS-940S receiver dynamic range is rated typically by Kenwood at 102 dB on 20 meters 50 kHz spacing with a 500 Hz CW band width with an overall intercept point of + 14 dBm Noise floor level of -138 dB. A typical blocking dynamic range at a point 200 kHz to either side frequency of the IF filter is -139 dB typically. TS-940S uses a Z80 type microprocessor which allows the 940S to be interfaced to any computer utilizing RS232 output. An interface option will be available later this year for the TS-940S to allow this function to happen. Actually there are two outputs on the rear of the 940S, ACC1 for a computer interface and ACC2 for connecting data communications.

Another feature of the 940S is the feature of examining contents of each one of the 40 emories by moving the switch to any one group of memory banks 1 through 4. The scroll button is utilized to recall each of the 10 memory contents including A and B VFO.

The Kenwood TS-930S utilized a large signal unit board in the bottom of the radio which contained the front end, control and IF functions of the radio. The 940S contains smaller sub units that are quickly and easily removed from the 940S. For example, there is an IF unit board, a control unit board, a PL unit board, etc. We believe the servicemen will find the 940S an easier radio to service.

The above highlights most of the important differences between the 940s and 930S. There may be more but these are the ones that were most obvious to us. Kenwood should be applauded for listening to all the various inputs they received because the 940S is a product of those concerns. BRAVO!!!

WHAT WE MEASURED AT IRI LABS

International Radio Inc. purchased TS-940S AT, Serial No.5090257 and found the following performance:

Power output:

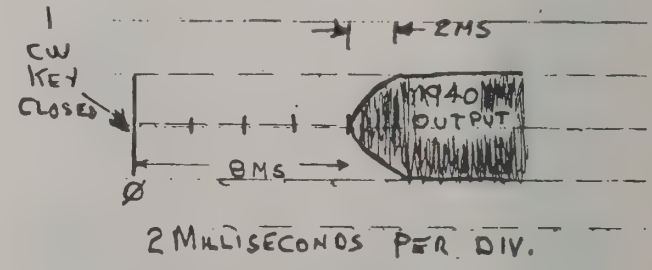
The transmitter measured 120 W output. Sensitivity, at 14 MHz measured .06 microvolts, noise floor measured .015 microvolts or 143 dbm. Using the S meter method for checking selectivity, we measured 2.53 kHz at 6 dB and 3.65 dB at 60 dB.

The RF signal of 14 MHz at 50 microvolts into the 940S antenna jack produced 9 + 5 dB.

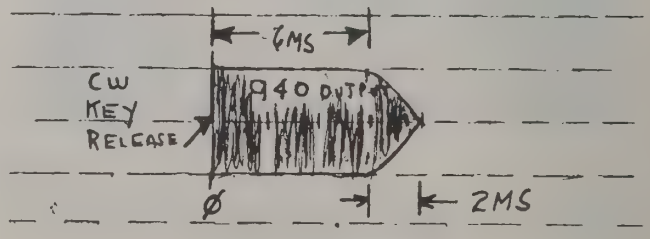
Using the method outlined in the ARRL Handbook for measuring blocking (20 kHz spacing SSB mode), we measured and found that instead of desensing the AC dB voltmeter at the desired frequency, phase noise actually raised the background noise by +1 dB, for a blocking dynamic range of -117 dBM.

The TS-940S in SSB mode: Two-Tone IMD (20 kHz apart) measured -85 dBM.

TS-940S CW keying waveform data:



CW KEY CLOSED



CW KEY RELEASED

The rise time and decay time measured 2 milliseconds. This type of waveform will produce a clean sounding CW note on the air.

The 940S Switching times in AMTOR:

Receive to transmit: 10 +-1 milliseconds.
Transmit to receive: 27 +-2 milliseconds.

Knowing the operation of the 930S makes operating the 940S relatively straightforward. We did find some minor operational improvements on the 940S vs. the 930S. With the processor off, we found the average output power to be approximately 2 times that of the 930S. The metering system also responded with a lot less dampening on the 940, meaning that without the processor on, and metering switch set to power, the meter fluctuates to an output of 50W plus with the ALC within range.

Another point worth mentioning is the 940S is virtually silent in operation from receive mode to transmit mode. There is no clacking of relays whatsoever. We have also found the 940S comes wired for keying a linear amplifier and that normally open contact goes to ground, although it is wired differently than the 930S. The linear amplifier's normally open contact is Pin 4 on the remote connector; however, the ground is picked up from the shell of the remote connector and not one of the pins, as in the 930S. There is also a normally open set of contacts controlled by the clock timer that could be used to control some external circuit. TS-940S does permit transverter operation but we found no transverter specifications outlined in the Operator's Manual.

The antenna tuner appears to be the same unit as used in the AT-250. (Includes 160 m band. Ed.) We noticed a 2nd power transformer which is driven from the secondary windings of the main power transformer and is used for low voltage regulated power supply source voltage.

Birdies (internally generated oscillations) were found in the receiver but it must be pointed out none of these birdies raised the S meter above S 0. The birdies were found at (USB) 97.68, 224.44, 1,529.78, 1,449.554, 5,928.80, 7,219.61, 7,359.33, 9,283.86, 15,104.49, 15,249.66, 22,819.52, 24,020.66, 29,699.90, 29,899.85 and 29,999.96 kHz.

MARS Transmit Operation can be activated by locating diode 135 on digital unit B. Digital Unit B is located directly behind the LCD sub display and the notch squelch controls. Cutting D135 will allow MARS operation. For the amateur operator who wants to utilize the TS-940S as a signal generator by cutting diode D130 on the same unit, the transmitter will operate from 1.5 MHz through 30 MHz.

The 940S comes with an Instruction Manual, a 13 pin DIN plug, a 7 pin DIN plug, a 6 amp fuse, power cable, and warranty card. The Instruction Manual contains 60 pages and explains the various features, functions and controls of the 940S. Also included in the 940S manual is information for installing all operations, circuit description, maintenance ' and adjustments, internal views, block diagrams and specifications. Foldout schematics are provided with the 940S Instruction Manual but for the technically oriented or for the fellow who really wants to know how the 940S works, or for someone who wants to follow schematics, we recommend purchasing the TS-940S Service Manual.

The TS-940S Service Manual contains 108 pages and it highlights circuit description, semiconductor data, disassembling, adjustments, signal and voltage level diagrams, terminal functions, PC board views and circuit diagrams, schematic diagram of the complete unit, AT-940 antenna tuner, SO-1 standard oscillator unit SP-940 speaker, VS-1 voice synthesizer unit, overall block diagram and specifications. The Board views contain multi-colored prints outlining transistors, connectors and IC's. The schematic diagrams contain voltages at key points.

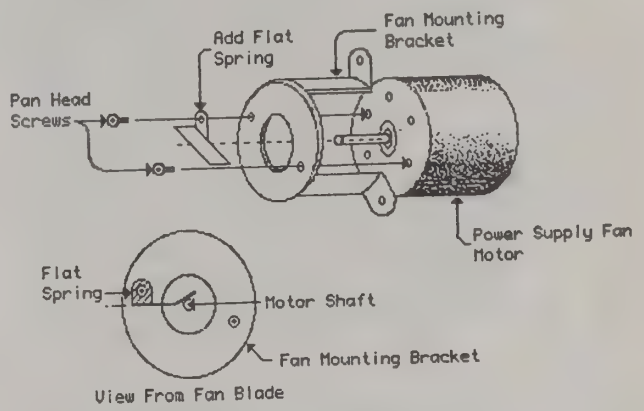
(International Radio, Inc. Labs)

MODIFICATION FOR TS-930S - NOISY POWER SUPPLY FAN

Some users of the Kenwood TS-930S transceiver have reported that the Power Supply Fan motor makes excessive noise. This fan motor was originally designed to drive a pulley system. By adding a small amount of lateral tension to the motor shaft, this noise is reduced or eliminated. The procedure listed below should correct any tendency of this motor to make noise.

Part Required: Flat spring PN G02-0549-04

Procedure: Add the Flat Spring as shown in the figures below. Time required for this modification is less than half an hour. (Trio-Kenwood and IRI)



SPACE TEACHER: HAM?

A New Jersey amateur radio operator has been selected as a finalist in the process to choose a teacher as a crew member of an upcoming space shuttle flight.

Jeannine Duane, WB2MBW, has been selected as one of the 118 semi-finalists out of some 10,000 teachers nationwide who submitted applications. If finally chosen, her primary duty on board the shuttle would be to operate ham radio gear to communicate with school groups on the ground, and later to deliver QSL cards in person to those with whom she held QSOs.

The project concept was her own, and was submitted as her "project" at the time she applied for the flight.

Later this year, the list of candidates will be narrowed to 10 finalists, from which the selection of a crew member and a back-up will be made.

(Westlink Report)

IF YOU RECEIVED RADIOSPORTING AND ARE NOT SUBSCRIBER, IT WAS NO ACCIDENT! PLEASE CONSIDER IT AN INVITATION TO JOIN!

The *SITES* of *ST. KITTS*

Bob Nash, VE3KZ, VP2KBZ

The spelling in the title is deliberate. I have not yet sold out to that extent to the decline of the English language! The "siting" of St. Kitts has little to do with sight-seeing although any good radioman knows that, in practice, one often finds both together. Perhaps it has more in common with "sighting" down a gun barrel, if I might exaggerate the performance of a TA-33 slightly. A six month sojourn makes the finding of suitable accommodation and the finding of a suitable radio location, hopefully at the same place, much more of a challenge than would be expected in a one week or weekend foray to such an island.

In the end, four sites on St. Kitts were used by VP2KBZ, as indicated on the map. In order of use, these were Fairview Inn, Conaree Beach, Bird Rock and Bayfords, the last of which became the "permanent" QTH for the last five months. Two of these are public lodging establishments which have seen the majority of DXpedition action on St. Kitts. Prominent action from Fairview Inn included the 1983 activity by VP2KBH, KBI, KBJ and KBK and from Conaree, the 1984 activity by VP2KBU, KBV and KCA.

Site #1 Aug. 23 to Sept. 2. We checked into the Fairview Inn upon arrival, a truly beautiful old Plantation House with cottages arranged in a tropical garden setting complete with a somewhat old but functional 50 foot windmill tower! This is a very comfortable site to DX from, great accommodation, with proprietor Fred Lam making all the guests feel like one of his family. The other advantage is the presence of a TV repeater immediately inland at 2953 feet ASL operating in the high band, giving a very strong signal thus minimizing TVI potential. At any rate, I don't believe there was a single TV set in the hotel complex! The disadvantage of this site is the previously mentioned TV site, the South East Range, rising to nearly 3000 feet North-north-east of the

Inn eliminating all radiation to or from Europe below 15 degrees. The path to N.A. is relatively unscathed, particularly to the western half. The obstruction gradually grows until the path to VE1 has the same problem as that to Europe. Notice that none of the short paths to Europe/N.A./Japan where 90 percent plus of the QSO's lie, are over a salt water foreground, but those long paths! During just a few days of operation on 20 m., even with a dipole sloping north, the long path Asians were outstanding.

Site #2 Sept. 3 to 11. From the standpoint of classical siting criteria, the site at Tradewinds on Conaree Beach is perhaps near perfect. Most QSO's take place from 45 degrees West of North to 45 degrees East of North. Virtually all of this arc from Conaree is directly across salt water from the antenna. The cottages are only 100 feet from the water. This, believe me, is a mixed blessing! This is indeed tradewinds country, which means a constant easterly wind coming right off the salt water. This means a fine salt spray on your antenna, salt water dripping from the screening and salt corrosion on all metal outside or inside the cottage! When I took down my 10/20 m. inverted vee at 15 feet after only a few days of operation, there was an encrustation of salt crystals on the bright green copper wire up to one-quarter inch thick in places! On the positive side, the grove of coconut palms planted behind the cottages are very handy antenna anchors although somewhat overly numerous. On the negative side is its proximity to the island garbage dump. Although you are upwind of this problem, the area is rather isolated and not populated by the cream of the island's fine inhabitants. A great place to visit in the "season" but pass it by the rest of the year unless you are part of a substantial group. An recent incentive to bring DXers to this site is the work of Mike, KC0FW/VP2KBU who erected a beam in February '84 for use at the Tradewinds by other visitors.

Site #3 Sept. 12 to Oct. 6. Moving over to Bird Rock, a suburb of the capital, Basseterre, my wife Marlene and I stayed with Ted Milstead, the other member of the project, an interim measure before Marlene's departure the following weekend and awaiting the remaining six members of Ted's family expected a week later. I put the antenna up to a lofty 25 feet and added the 40/80 trap dipole inverted vee to the single support. The path to N.A. now ran across town to mount the hills and the range at a distance of about 4 miles, obstructing the path up to about 8 degrees take-off angle. The path to Europe took off right up the side of a 500 foot hill. I marvel at how well it worked in that direction using high angles only, above about 25 degrees! The urban situation at this QTH made Amateur Radio a much more public operation because of proximity and the open air housing design. It was immediately apparent that the Channel 10 signal from Antigua, 50 miles away and over those same hills, was no match for the local field from my dipoles! The neighbors' TV audio was a perfect keying monitor! To make matters worse, both the popular daytime children's programming and the late night movies all seemed to be on that channel. With the full Milstead family now arrived and the Sept. 19 Independence Day space-accommodation crisis behind us, a search for another house began in earnest.

Site #4 Oct. 7 to Mar. 1. The house at Bayfords was being vacated at just the right time by an English Architect finishing a two year stay. The location is the highest elevation habitation on the island and somehow fate made this only the second house I was to look at. At approximately 1000 feet ASL, all paths from -45 to +45 degrees from North are again unobstructed but this time we are also talking horizons below zero degrees elevation over most of this arc. The average downward slope of the land away from the antenna in the northerly direction varies from a fraction of a degree to 5.5 degrees in the direction of northern Europe. This feature improves the low angle performance of most of the antennas by effective downward tilting of the ground reflection patterns. The site is obstructed only to the West and to the East. The South East Range two miles away covers up 11 degrees of elevation due West and a small hillock immediately east of the site cuts down the due East path in much the same way. The path over at least 90 degrees of the southern arc is as unobstructed as that to the north, allowing optimum long-path performance to Asia and as much signal from South America as you could ask for. At this QTH you can work weak, watery northern S.A. signals on back-scatter whenever any band is open to anywhere! The triband TA-33 plus inverted vee's for 160, 80, 40, 20 and 10 were put to regular use on all bands from 10 to 160 including 30, producing over 22,000 QSO's at this site. The antenna elevation above local ground was 30 feet in all cases using two pipe supports, one at each end of the house.

A number of other sites are shown on the map for reference. The QTH of the late Kit Carson, VP2KC, is just north of Bayfords. Although only a couple of hundred feet above sea-level, it is near enough to the coast to command over 180 degrees of unobstructed take-off centered on North-east and far enough away from the mountains to keep the horizon to the West down to less than 10 degrees. Easily the most beautiful man-made spot on the island, befitting probably the richest man on the island, the antenna farm was optimum and the records, past and present of VP2KC, KAA and KAC tell the story of its success eloquently.

The next location is that of VP2KM/V44KM, the home of Ken Mallalieu, now a Silent Key, and present QTH of his grandson, Hugh, carrying on with the famous call. Located next to the Ocean Terrace Inn in Basseterre and a stone's throw from the Technical College, the big windmill tower on the hill must push N.A.-bound signals over those same mountains but the European path across land is good with the ocean easily visible from the tower. It was sad that I missed the chance to meet Ken by only a few months after many QSO's, most back in the AM days. Likewise, I missed the experience of meeting VP2KC who was ailing the first day I stopped by his estate and was off the island on the other several times I inquired.

Another of the Caribbean Mallalieu clan is Peter, VP2KG/V44KG. Located near the Royal St. Kitts Hotel in the Frigate Bay area, Peter's RF must climb at least 5 degrees to get launched to most of N.A. but it's virtually clear sailing anywhere else. Peter's restaurant, The Patio, is an experience not to be missed, an even more intimate version of the hospitality experienced at the Fairview Inn, with a garden in which collected greenery from the entire Caribbean is on display, particularly from Dominica where you may remember Peter as VP2DM.

Thus ends a tour of the "sites" of St. Kitts. I hope you enjoyed this RF tour of the island.

Best of V44 DX! - VE3KZ, VP2KBZ

Are you for or against lists and net operations? Here are two opinions on the subject:

OPERATING ON DX NETS

Tex Myers, N6AHV

There have been many arguments pro and con about the use of organized nets to work DX contacts. It is not the purpose of this article to take sides on the debate. Rather, it is directed at those who, by choice or necessity, find themselves working a DX net. (The necessity arises when a DX station chooses to do his operating in the sometimes-horrendous pileups alone or for convenience.) The DX net can be a fairly time-efficient way to work a station when the alternative is to have your low power station or ground-plane vertical stomped on by the big guns in a freestyle until the band is closed and the station gone. Where do you find some of these nets and what is the protocol? Here are a few ideas.

The W7PHO "family hour" meets around 14.227 daily at 1500Z and at 2230Z. A 15 meter session is held anywhere from 1800 to 2100Z on 21.345 DX stations check in on frequency and no advance list is taken. Net control asks for the last letter of the callsigns of those wanting to work the DX station, acknowledges five or ten callers and gives each of them a shot at the DX. After those calls are made, net control solicits the crowd again, and the process is repeated. If more than one DX station is on frequency, net control may switch back and forth between two sets of callers. When in doubt, listen a while before transmitting.

The 14.220 net meets - where else - 14.220 daily at 0500Z. Started by Jim Smith P29JS/VK9NS, this net is successfully used by many VK's and ZL's. The usual procedure is for net control to take check-ins from the U.S. (2 to 6 from each call area) and Europe (not always in the same order... listen to pick up on the process for that night.) When net control calls you, you may make a call to the DX station of your choice. Time and crowd permitting, you may ask for and get the okay to call more than one station on that turn. The net is well controlled by various stations on different nights (and sometimes by Jim Smith himself).

The INDXA net meets on 14.236 daily at 2330Z. There are usually two net controls, one each on the east and west coasts. Off frequency, lists are taken of those wishing to work a specific station. Give the last two letters of your call to get on the list. If you make it, you are given the opportunity to work the DX station back on the net frequency. The call-up for those trying to work a not-so-rare DX station may be right on the net frequency rather than off channel. Listen and see.

Snookie's Watering Hole, led by KA1DE, meets daily on 21.335 from 2100 to 2200Z. Procedures are similar to those of the INDXA net.

The Brown Sugar Net meets daily at 0200Z on 14.309. Procedures change with the tide, so, once again, listen. This is a fun, loose net.

There are many others too numerous to list here, but these are some of the more popular ones. As you may have gathered by now, the key to fitting into the style of a net is to listen! By doing so you get to know what works, just as you do in a frees operation. Have fun and good hunting.

(So. Calif DX Club Bulletin)

LIST, OR NOT TO LIST

TOM HOYNE, N6NI

I am writing to express my views on the most controversial subject in DXing today - lists and nets.

Some other countries, most notably the USSR, refer to DXing as "radiosporting." It is an apt term since it implies competition. Indeed, the tabulation and publication of DXCC standings brings out the competitive nature in all of us; it's what keeps us chasing the rare ones. It is also this competition that has so widely polarized DXers on the subject of lists and DX nets.

Many times, those who speak out against lists are told, "if you don't like it, ignore it." If this were simply a style of operation that was disagreeable but harmless, it would be easy to ignore. That is not the case, however. It is harmful because it cheapens the DXCC award.

It has been said that the reason some of us are so anti-list is that we're on ego trips and resent the little guy getting through. NOT SO. Our hats are off to the little guy who gets through, as long as he does it himself. The upper ranks of the DXCC roster abound with those who got there using modest equipment and no lists. "Yes, but it was easier when those guys did it. The bands are more crowded today, and the competition is stiffer making the little guy's chances slimmer." Was DXing really easier for the modest station in the days on the heterodynes? On CW, I'll bet the smaller station has an easier time today than he did years ago since there is such a higher percentage of stations on phone. In addition, it sure seems like there have been more DXpeditions over the past decade than there ever were 30 years ago.

Let's forget about all the bickering for a moment. Look at what the hobby of DXing is really all about and you can see the biggest reason of all for not working lists and nets. Supposedly, we are all doing this because it's fun and exciting. I'll admit there is some ego boosting that goes on, but its really the excitement that has us chasing the rare ones. Can anyone deny that there's more excitement in working a rare one on your own (especially if it takes a while) than in having someone else locate it for you and orchestrate the QSO? That's why the ones who suffer are not those who miss the rare one because they refuse to get on the list. The true losers are the list participants. They deprive themselves of the excitement of working it on their own. He who refuses the list knows what a great feeling it's going to be when he finds and works the rare one by himself. Clearly, those who operate lists are demonstrating that, to them, the almighty QSL is more important than the fun and excitement of the activity of DXing itself. Is their pride no bigger than that?

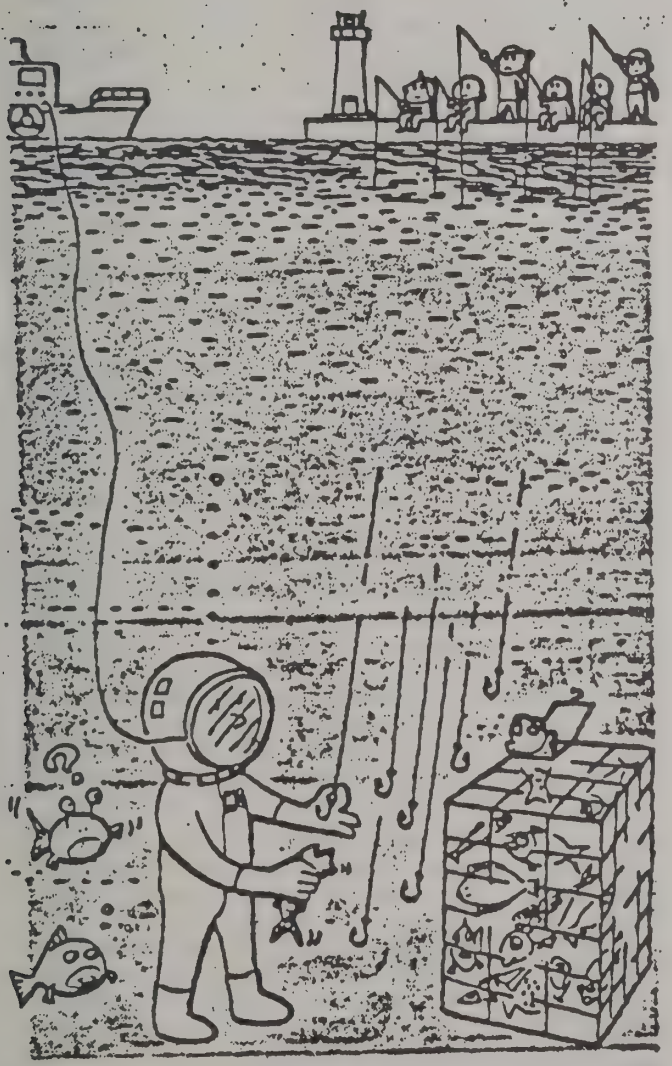
Our government allows us the privilege of amateur radio because, among other things, the skills we develop while operating can prove invaluable in times of emergency. DXing has been touted as one of the activities within our hobby that hones such skills. The list operator suffers in this respect also, whether he's one of those on the list or the DX operator himself. He doesn't develop much more than the ability to hold up his hand when his name is called. I'm not sure I would

want him on the other end when my ship is sinking in the South Atlantic.

The very existence of DXCC establishes DXers as participants in radiosport. True sport provides the greatest amount of fun and excitement to the most people. True sport is the best way to improve skills. Working DX from a list or net is not true sport. If I stood in line at the Redondo Beach pier awaiting my turn to have a diver attach a large fish to my hook I would be ashamed of myself. If I had obtained a fishing award through such a tactic, it wouldn't be worth the paper it was printed on.

Let's get back to the true spirit of DXing!

(So. Calif DX Club Bulletin)



リスト式魚釣り？！

Kan Mizoguchi, JA1BK sends us this picture which was published in the November issue of CQ HAM RADIO magazine in Japan. Looks like the idea of working them on your own is catching on everywhere. Doesn't it feel better to catch them on your own?

LETTER TO THE (SCDXC) EDITOR

JOHN HARRIS, W6MUM

I read the article by Tom Hoyne, N6NI, in which he expressed his views concerning list operations. Everybody has a right to their own opinion concerning lists and nets, and I feel I have the right to express my own opinion as well.

First, lists and nets are here to stay for the basic reason that many foreign amateurs prefer to operate that way, rather than being driven off the frequency by an uncontrolled bedlam. Amateurs with big "super-duper" antenna arrays who want to "work it on their own" rather than ask for help prove absolutely nothing except that they may be putting a better signal over a multitude of others with lesser equipment, or moreover, lesser affluence.

I might add further, that some extra-class operators are the biggest offenders on the DX bands when it comes to good operating ethics of tactics at a time when they should be exemplary in conduct.

Amateur radio was never designed to support any form of egoism, jealousy or bigotry, even though this manifests itself many times on the bands. It is a hobby, a great fraternity, and when used in the right way, it is one of God's greatest gifts to mankind. The fact that a particular individual can put a louder signal somewhere on the earth than a lot of others doesn't necessarily mean that he or she is a better operator, or even that he of she is more "skilled".

The truly good operators are the ones who show courtesy and consideration to others operating on the band instead of trying to blast somebody off the frequency with untimely remarks and untimely calls, to the disgust of all who listen. To have superior equipment is well and good, but to use it prudently instead of selfishly is in the true essence of amateur radio! 73 (SCDXC Bulletin)

Here it is, from all the "three sides of the fence!" What is your feeling on this subject?

My personal experience of chasing DX and DXCC includes some new ones worked on the list. I have to admit, that with the advent of DX repeaters and DX club members chasing DX, I got pulled into this mode of working DX. "It doesn't matter how you get them. Just get them any way you can!" I almost worked up to the DXCC Honor Roll four times with the different calls I held. Looking back, the most valuable DXCC was the one I earned as a SWL and OK3BU. There were no repeaters, there were no lists and you never heard nets in those days. I looked for the DX myself. The number of countries I heard or worked measured my skills.

My latest quest for the DXCC Honor Roll using the VE3BMV call was spoiled by lists and nets. DXCC to me was always a long term competition. I found myself chasing those rare ones with the "list undertaker's" help. It was like shooting the animals in the ZOO or fishing in an aquarium. The magic of the competition lost its meaning. The result was that I got turned off by this "sport," and I haven't QSLed any new ones in the last four years. Also, I never applied for the Honor Roll.

I will still work the rare station, but I prefer to find and work DX without the undertaker.

My attention is now focused on contesting. There we can still "ham it up" on our own and enjoy every minute of it! (VE3BMV)

THE WARC BANDS AND CONTESTING:

WHAT SHOULD WE DO?

DAVE GOODWIN-HILL, VE2ZP

With the news that US amateurs will soon have access to the 24.89-24.99 MHz band, we should begin thinking seriously about how contesters should approach this and the other new bands.

Amateur Radio came out of WARC '79 stronger than it has ever been. We not only held on to our existing allocations, but recovered most of our Amateur Satellite allocations lost in the early 1970s, and even added three new HF bands.

10.1 MHz is a band we share with other services, with Amateur radio as a secondary service. 18.1 and 24.9 MHz are to be exclusive amateur bands, but become exclusive only when existing users are re-located. Our apparent success at WARC '79 has bred a circumspect attitude among amateur societies. The thinking is that if we can make sharing work at 10 MHz, we may not only be able to keep these bands, but eventually obtain new allocations. The method chosen to make 10 MHz sharing work is, strangely, to discourage activity. No contests are permitted. The consequence of this was a steady decline in activity after the initial surge of interest in the new band. Now hearing more than three or four amateurs on the band at any one time is a remarkable occurrence.

The reason for discouraging activity on 10 MHz is fairly straightforward. With the exception of channelized FM and the growing packet radio networks, amateurs do not frequency coordinate their activity much beyond simple band planning. We have VFOs and we use them to their best advantage, in a way no other service could contemplate. Other services coordinate their frequencies of operation and stick to the plan as a means of avoiding interference and making operation easier for non-technical operators.

Their concept of frequency use is different. Fixed service users have a channel allocated to them and consider it theirs whether they are transmitting on it or not. For amateurs, a frequency on which there is no apparent activity is open for use.

If amateurs were to make regular use of 10 MHz, the possible incidence of interference to primary fixed service users increases. It is easy to see how conflicts could arise, and it must be remembered that amateurs would be on the losing end of any conflict.

On the plus side, the fact that CW is the predominant mode on 10 MHz lends amateur activity more flexibility. Narrower bandwidths make avoiding other users easier and are a virtual necessity in such a small and cluttered band.

CW is not as likely to generate 'dogmatic' frequency use as SSB. WE are all familiar with the various crackpot 'Tadpole Collectors Nets' and the Canadian 'Phone Patch - QRU Nets' that insist on their right to occupy this or that frequency on the basis of long-term successful operation. They appear to be an exclusively SSB phenomenon, so conflicts between this type of operation and 10 MHz fixed service stations are unlikely.

These new bands are very different from our present HF allocations, and they deserve to be used differently. They are not, as yet, part of regular amateur's HF activity, even though 10 MHz has been open to amateurs in some countries since 1981. Being active on 30 meters is still considered a rather esoteric thing to do. We can probably expect a similar differentiation with the 18 and 24 MHz bands. Five band awards like 5BDXCC and 5BWAZ will probably never mean the same if they could be earned on the 20, 17, 15, 12 and 10 meter bands.

I don't think I have to make the 'competition is good' argument to readers of RADIOSPORTING. Yuri's editorials express these ideas very well.

If contests are to become a part of regular activity on these new bands, what are the problems and the risks?

Popular contests, it must be admitted, can take over the bands, and cause considerable dislocation to non-contesters. In a contest, finding a clear frequency on which to call CQ is a constant problem. Although seeking to avoid interference, a certain amount can be tolerated. I can afford to get pretty close to that commercial RTTY system without it bothering me, but if that RTTY system is a stand-alone, unattended device, with no skilled operators standing by, I could easily disrupt its communications.

As we are secondary to the fixed service on 10 MHz, interference from amateurs could loosen the tenuous toe-hold we have on the band. That is a real danger.

We have a means of avoiding interference that other services do not have. We can change frequency at the first instance of conflict. We can avoid getting near that RTTY station in the first place. The question is, will we? I choose to believe we will, but I am not completely convinced. The best way to find out is to try.

We have an opportunity to make a real and unique experiment on 10 MHz. Rather than continue the move to better electronics and station hardware, 10 MHz offers us the chance to experiment with the social impact of an amateur contest on a completely different service.

The 'Sprint' or 'Midnight Special' contests may be useful models for any such experiment. If we set up a few four-hour contests at varying times of the day and year, we could not only get a feel for the band's potential, but by measuring the reaction of non-amateur users, determine whether other longer experiments or even permanent contests are possible. If few or no complaints are registered (DOC, FCC, etc. would provide this data) perhaps a twenty-four hour contest is practical.

To do this requires initiative, and I think only IRSA and RADIOSPORTING is capable of supporting such a move. IARU societies, staffed by few active amateurs, are probably locked into their 'discourage 10 MHz' consensus. Events must overtake them if there is to be any benefit gained from the new bands.

Should contests prove acceptable on the 10, 18 and 24 MHz bands, what sort of contests should they be?

I feel adding the new bands to the standing all-band contests would be a mistake. Their long-standing record scores system would be upset. We

need a new band in the big DX contests like we need a hole in the head.

Given that 10 MHz will continue to be a CW band, and 18 and 24 MHz will have both SSB and CW activity, entrants in a CW contest would have nine bands to choose from, and SSB entrants only eight. Making comparisons between CW and SSB contests, already difficult, would become harder.

Let us accept that the new bands will continue to be different. If we can make contesting work on these bands, let's try single-band contests, which have worked so well on 160 and 10 meters, or 2-band SSB and 3-band CW contests. Separate operating awards would compliment these nicely.

Using the separateness of these bands, we can add a little variety to contesting and DXing. Focusing activity on these new bands would help generate interest and give people reason to put some serious effort into equipping their stations for these bands.

If there is some positive response to these suggestions, a proper proposal for an experiment may follow this article. Before the decisions are made for us, let's take some initiative and develop these new bands. (VE2ZP)

10 MHz BAND

DAVID SUMMER, K1ZZ

"The reason the 10 MHz band is off limits for (ARRL) competitive activities isn't 'that many countries around the world do not have use of the band.' While it's true that access is not universal, that's not the reason for the restriction.

"The real dilemma is that the 10 MHz band is the only place in the entire HF spectrum where the Amateur Service has secondary status. There are other shared bands, but this is the only one where another Fixed Service remains the primary occupant of that 50 kHz of turf, and it wouldn't take many complaints of interference to the Fixed Service by amateur stations to force an administration (including FCC) to severely curtail - perhaps even eliminate - access to the band by its amateur licensees.

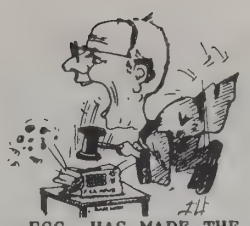
"Use it or lose it' is a popular slogan on some of our VHF and higher bands. In the case of 10 MHz, it's 'Misuse it and lose it.'

"The U.S. has kindly agreed to make no assignments to stations other than the Amateur Service in the 10 MHz band. Accordingly, our domestic status is primary. But this does not relieve us of the obligation to take whatever regulatory steps may be needed to resolve interference problems, 'including cessation of operation.'

"So much the bad news. The good news is that the same situation does not apply to 24 MHz - at least, will not after July 1, 1989. Should we therefore recognize operation in that band for contest and awards credit? Good question, and one the ARRL Board will be wrestling with for a while. Even without the Fixed Service problem that exists at 10 MHz it's not cut-and-dried; for example, even among contesters I've found little enthusiasm for the spectra of that band being occupied by multi-multi contest stations calling CQ all weekend."

(K1ZZ is executive vice president of the ARRL.)

(The DX Bulletin)



FCC NEWS

BILL GRENFELL, W4GF

FCC HAS MADE THE NEW 24 MHz BAND AVAILABLE TO USA AMATEUR LICENSEES EFFECTIVE 0001 UTC, JUNE 22, 1985. This action in PR Docket No. 84-960 includes the 10.100-10.150 MHz (30 meter) band. Action on the 420-430 and 902-928 MHz bands "will be considered in a subsequent Report and Order." General, advanced and Extra Class licensees can operate throughout the 30 meter band with A1A and F1B (CW and FSK) emissions with not more than 200 watts peak envelope power (PEP) output. The entire 24.890-24.990 MHz (12 meter) band is available to General, Advanced and Extra Class operators for use of A1A emission at not more than the maximum authorized 1500 watts PEP output. 24.890-24.930 MHz is available for F1B and 24.930-24.990, also at not more than maximum authorized power output, with A3E, J3E, R3E, H3E, F3E, G3E, A3C, F3C, A3F, F3F emissions and, for all three classes. The foregoing designators translate to: Telephony, amplitude modulated with double sideband, with single sideband suppressed carrier, with SSB reduced carrier, and with SSB full carrier; Telephony with FM and with phase modulation; Facsimile, with AM and with FM; Television, with AM and with FM.

LAND MOBILE RADIO SERVICES USE OF THE BAND 421-430 MHz IN DETROIT, CLEVELAND AND BUFFALO IS PROPOSED BY FCC IN ITS NOTICE OF PROPOSED RULEMAKING (NPRM, GEN Docket No. 85-113) adopted April 15, 1985. The Notice cites the sharing of 420-430 and 440-450 MHz bands by the Radiolocation Service on a primary basis, the Amateur Service on a secondary basis, as specified in footnotes 651 and 652 of the international allocation table of the World Administrative Radio Conference agreement in 1979 (warc '79). During the proceeding to implement WARC '79 allocations, the United States and Canada came to an agreement regarding operation adjacent to the border which, while primarily concerned with radiolocation use in the US and land mobile use in Canada, "...will also allow land mobile operation by the United States within the coordination zone..." The FCC refers to the PR Docket 84-960 NPRM proposing deletion of the 420 430 MHz band from amateur use in the below-the-border zone "...where mobile spectrum is in short supply; ...land mobile operations in Detroit, Cleveland and Buffalo...is possible because Government radiolocation transmitters are not currently located near these cities and the Government intends to minimize operations in those vicinities." This proceeding does not propose amendment of the Amateur, Part 97, rules but would amend the FCC Part 2 frequency allocation table to put the Non-Government Land Mobile Service on a primary basis in the 420-430 MHz band.

PROVISION FOR AUTOMATIC CONTROL OF AMATEUR RADIO STATIONS IS PROPOSED BY FCC in a Notice of Proposed Rule Making adopted April 5, 1985 (PR Docket No. 85-105). Such operation would be limited to frequencies above 29.5 MHz but would include 28.20-28.30 MHz beacons. Section 97.3(m) (3) would read: "Automatic control means the use of devices and procedures for control of an amateur station without the control operator being present at the

control point." Section 97.79(b) would read, in part: "Every amateur radio station, when transmitting, must have a control operator. The control operator must be present at the control point of the station, except when the station is transmitting under automatic control..." New Section 97.80(b) and (c) would read: "(b) When under automatic control, devices must be installed and procedures must be implemented which will insure compliance with the rules when the control operator is not present at the control point of the station." No amateur radio station may be operated under automatic control while transmitting third-party traffic." The Commission advised "...we believe that now is the time to expand automatic control to all amateur operations, prohibiting its use only in those situations where there is a justifiable reason why automatic control should not be used." FCC invites amateurs to submit comments in particular "...calling to our attention any problems that may arise by expanding automatic control to encompass all amateur radio operations." The FCC also indicated it did not want to introduce any innovations which would be disruptive or change the character of the Amateur Service. Original comments are due by June 25 and reply comments by July 25. FCC's address is Washington, D.C. 200554. Refer to Docket No. PR 85-105.

EFFECTIVE JUNE 17, 1985 THE EMISSIONS AMATEURS MAY USE IN THE 1800-2000 kHz BAND ARE EXPANDED TO INCLUDE RTTY, FM AND PHASE MODULATION TELEPHONY, AM AND FM FACSIMILE, AND AM AND FM TELEVISION. The added emission designators are: F1B (FSK including RTTY); A3F and F3F (Am and FM television). By footnote (3) to Section 97.61 (b) "...J3E, R3E and H3E may also be used." J3E is Single Sideband Suppressed Carrier (SSBSC), R3E is Single Sideband Reduced Carrier (SSBRC), and H3E is Single Sideband Full Carrier (SSBFC). The Commission said it was making the change because "...additional emission modes are needed so that amateurs can experiment with radioteleprinter techniques." While it was not specifying subbands for particular types of emission, FCC urged adherence to a voluntary bandplan which ARRL will develop. FCC also noted that its action in this case "...does not in any way limit our discretion in..." the PR Docket 84-874 proceeding regarding the use of 1900-2000 kHz for Radiolocation.

ON MARCH 25, 1985, THE FCC ADOPTED AN ORDER AMENDING THE AMATEUR RULES TO CHANGE THE FREQUENCY AND EMISSION TABLES TO MORE USABLE FORMATS. Because the action was for the purpose of clarifying the rules and the changes were non-substantive, the usual provision for comment via a Notice of Proposed Rule Making was eliminated. In Section 97.7 it lists the frequency bands or subbands available to each class of operator licensee together with footnotes indicating any conditions or limitations on usage of the bands or subbands and frequencies available to the Amateur Service, with the emissions authorized therein. Paragraph (b) of that Section specified numbered statements of emission limitations applicable to most of the bands. This action injects the WARC '79 three unit letter-number-letter emission designators into Section 97.61, en-masse. Appendix 3 of the Commission's Amateur Radio Service rules was amended on October 26, 1984, by FCC's General Docket No. 80-739, to substitute those new WARC '79 emission classifications "which appear most applicable to the Amateur Radio Service." Also amended were: Section 97.85 Repeater operation; Section 97.86 Auxiliary operation; 97.87 Beacon operation; and 97.95 Operation away from the authorized fixed station location.

FCC HAS PROPOSED EXPANSION OF TELEPHONY PRIVILEGES IN THE 7075-7100 MHz SEGMENT OF THE 40 METER BAND TO INCLUDE LICENSEES LOCATED IN THE CARIBBEAN INSULAR AREAS (NPRM, PR Docket No. 85-104). This is in response to a petition filed by David Novoa who stated that FCC-licensed amateurs in the Caribbean are situated similarly to amateurs in Hawaii and Alaska who were recently granted telephony privileges identical to those he had requested. In the comments on Novoa's petition received from other interested parties by FCC were recommendations to limit the proposed privileges to Advanced and Extra Class operators in order to insure minimum interference to amateur telegraphy and radioteleprinting operations in the continental United States. Also received were recommendations to expand the size of the proposed telephony segment to 7050-7100 kHz because authorization is pending for a commercial shortwave station to operate above 7100 kHz. The proposed 50 kHz band would be available to all amateur stations outside the continental 48 states. FCC advises it seeks comments not only on the proposal itself but also on the foregoing described alternatives. Original comments were due on or before June 17 and reply comments by July 17, 1985.

FCC HAS ORDERED AN AMENDMENT TO AMATEUR RULE SECTION 97.121 TO CLARIFY HOW AN OPERATOR USING THE STATION AND CALL SIGN OF ANOTHER OPERATOR HAVING LESSER OPERATING PRIVILEGES SHOULD IDENTIFY HIS OPERATION WHEN USING PRIVILEGES EXCEEDING THOSE OF THE STATION LICENSEE. The amended Section 97.121 which is titled "False Signals" reads as follows: "An amateur radio station must not transmit:

(a) False or deceptive signals or communications by radio; NOR

(b) For purposes of identifying the station, any call sign which has not been assigned to it. Notwithstanding the foregoing, when a station is operated within the privileges of the operator's class of license but which exceed those of the station licensee, station identification must be made by following the station call sign of the station being operated with the operator's primary station call sign in accordance with Section 97.84 (b)."

The petition was filed by David Popkin. The Effective date of this rule amendment was May 20, 1985.

IN MID-APRIL ARRL HEADQUARTERS OFFICIALS VISITED FCC'S GETTYSBURG LICENSING FACILITY TO LEARN WHAT WOULD BE INVOLVED IF THE LEAGUE DECIDES TO PROVIDE ASSISTANCE TO THE COMMISSION IN THE AREA OF CALL SIGN ISSUANCE, AND TO EXPLORE THE POTENTIAL COST TO THE LEAGUE.

ARRL HAS FILED COMMENTS IN PR DOCKET 85-23, THE "MICROWAVE ACCESS DOCKET" DRAWING ATTENTION TO SEVERAL ERRORS, FOR THE MOST PART CONCERNING THE RELATIVE STATUS OF SERVICES SHARING A BAND UNDER THE ITU RULES. "In 220-225 MHz, for instance, both ITU and FCC Part 2 allocations show the Fixed Mobile and Amateur Services as co-primary, yet restrictions in the amateur table proposed in 85-23 are those used to protect a primary service from

being interfered with by a secondary service. "In the 10 GHz band, non-government radiolocation services are clearly secondary to amateurs in the Part 2 rules, yet 85-23 shows the reverse. ARRL comments also repeat the League's request that the 1.2 GHz allocation be released to the U.S. Amateur Satellite Service as soon as possible, to allow U.S. amateurs to use AMSAT-OSCAR 10 when it is operating Mode L. League comments support the Commission's proposal to favor voluntary band plans over FCC-imposed subbands." (ARRL Letter, 04/85)

ARRL HAS FILED COMMENTS CONCERNING THE EXAM RETEST WAIT PERIOD, THE PROCEDURE FOR ADVANCED NOTICE OF EXAM SESSIONS AND THE CREDIT FOR CERTIFICATES OF SUCCESSFUL COMPLETION, AS PROPOSED BY FCC IN THE DOCKET 85-21 RULE MAKING PROCEEDING. ARRL opposes the elimination of the required waiting period, stating "The present rule is not something that can or should be left to VECs to establish for their own programs, since to do so would encourage the establishment of short waiting periods at the expense of the program integrity." The FCC also proposes to eliminate the requirement that advanced public notice be given for test sessions for less than five people. ARRL opposes this amendment on the grounds that it could lead to abuse, or possible perceived abuse, of the Volunteer Examiner Program. ARRL comments raise the question of credit for Certificates of Successful Completion, and suggest that if the Commission seriously wishes to improve the Volunteer Examiner Program, the question of credit for written examination elements should be answered immediately. (The ARRL Letter, 04/85)

ARRL COMMENTS ON FCC'S MASS MEDIA DOCKET 85-38 CABLE TV DEREGULATION TO THE EFFECT THAT, "...IF ADOPTED (IT) WOULD DELETE QUALITY PERFORMANCE STANDARDS FOR CABLE SYSTEMS AND INCREASE PERMISSIBLE SIGNAL LEAKAGE LEVELS IN THE 54-216 MHz BAND." "...that an increase in signal leakage levels sends the wrong message to those cable companies that are not complying with the present rules. "...it would appear that the proposed increase in maximum cable signal leakage levels is unnecessary to well-engineered, well maintained systems..." While joint ARRL/NCTA engineering efforts are ongoing, there has been effectively no success in resolving interference problems submitted by the ARRL to NCTA for review and assistance. Of 37 cases referred to NCTA (National Cable Television Association) only one has been resolved, and 29 complaints have indicated no abatement in cable signal egress interference...The ARRL comments also take exception to the Commission's comparison of cable leakage to radiation from devices covered under Part 15, such as computers. While computors may be switched off, cable leakage is constant. Computors are also "point source" radiators, while any RF that escapes from the coaxial cable may use the entire conductor as an antenna. (The ARRL Letter, 04/85)

FCC'S MASS MEDIA DOCKET 84-706 ORDER AUTHORIZES THE USE OF 7100-7300 kHz BY FCC-LICENSED BROADCAST STATIONS IN THE PACIFIC OUTSIDE ITU REGION 2. Region 2 includes North and South America and Greenland. ARRL recommended "quiet periods" to protect Region 2 Amateur operation while broadcasters pointed out this would open the way for international broadcasters not licensed by FCC to occupy the frequencies during those quiet hours. FCC adopted a requirement that none of the affected stations may operate at time with antennas oriented toward Region 2. Also, during 0300 to 1600 UTC, radiation in any easterly direction that would intersect Region 2 must be limited to a specific level (at least 6 or 12 dB) below the level from the main lobe of the antenna. (The ARRL Letter, 04/85)

THERE HAS BEEN AT LEAST ONE PUBLISHED REPORT OF CHEATING DURING A VOLUNTEER SUPERVISED EXAMINATION. During a taped code test, two of the Volunteer Examiners became suspicious of two applicants and found upon checking that they both had perfect scores, but for the previous month's examination! The test has been changed. "Once discovered, one of the applicants bolted for the door, taking his FCC 610 application with him. The other applicant eventually told the examiners that a third applicant had recorded the code test using a micro-recorder at a previous session." The VE team was able to confiscate the crib sheets which these two applicants had. In accordance with the FCC's instructions to VECs, the FCC's Compliance Branch has been notified of the identities of those involved and will be forwarding all related paper work once received from the VE team. (W5YI Report, 05/85)

A PORT ARTHUR, TEXAS AMATEUR HAS GONE TO CONGRESS IN AN ATTEMPT TO STAVE OFF THE TRANSFER OF 1900-2000 kHz IN THE 160 METER BAND TO THE RADIOLOCATION SERVICE. He contends that the FCC has acted illegally, and in direct violation of the 1979 WARC accords and the Administrative Procedures Act. He claims this due to the issuing of Docket 84-984, which reduces to "secondary" the status of amateur radio in the disputed spectrum. In letters to various Congressional leaders, including Senator John East, he notes that the frequency allocation table from WARC '79 clearly shows that the US Amateur Radio Service is a co-primary spectrum user. He charges that the FCC has illegally altered the allocations table because of domestic considerations that are in conflict with approved World Allocation Table, which shows that amateurs are co-equal with fixed mobile and radiolocation users. (WESTLINK Report, 05/85)

THE FCC WILL SHORTLY BEGIN A PERFORMANCE REVIEW OF THE ACTIVITIES OF ALL INDIVIDUALS AND GROUPS SERVING AS VOLUNTEER EXAMINATION COORDINATES. The purpose will be to determine if each is truly qualified to continue in VEC capacity. This will be based upon overall activity, pass rate and adherence to VEC program rules. Included will be determination of the security integrity of each VEC in regard to testing materials and methods of administering exams, and the overall quality of the completed paperwork that is supplied to FCC's license processing facility at Gettysburg, PA. (WESTLINK Report, 05/85) I have seen some examples of the paperwork supplied to Gettysburg, and it is pretty sloppy! Many examinees are having to wait for their licenses because the forms have to be returned for lack of all the required information.

MARCH '85 VOLUNTEER EXAMINATION STATISTICS: Number of sessions, 252; Number of locations, 241; Elements passed, 3478; Elements failed, 2700; Elements Administered, 6178; Lowest pass rate, 16.67%; Highest pass rate, 95.83%; Average pass rate, 56.30%. (W4GF)

EMERGENCY TRAFFIC

Chuck Clark, K4ZN

AN INVITATION

Amateurs who handle traffic as a major part of their operating sometimes wonder how many amateurs there are who would use amateur radiograms for their correspondence if they knew that they would be welcome. There is nothing deader than a traffic net with no traffic to handle. When that happens anything is appreciated. Even when the load is heavy we're always glad to have one more. Try us out!

And not only amateur radio correspondence. Any correspondence (except business) going where amateurs may handle third-party traffic, is welcome. You're doing traffic handlers a favor by asking them to handle your messages. You're doing Amateur Radio and the country a service, because handling your message gives amateurs an opportunity to maintain and improve their skills so as to be ready should they be needed in an emergency. You are doing yourself a favor by saving the cost of postage and stationery and a trip to the mailbox. Often an amateur radiogram has an impact on the recipient that a letter or greeting card does not - it's something different. It is done by people, not by machines, and it represents free service all the way. (Nobody is doing it for money.)

What to say? To whom? Most of us have friends and relatives in distant places, and they have birthdays, celebrate holidays, anniversaries, graduate from school, get jobs, promotions, retire, marry, have children, die and do many other things that could occasion a word of congratulation or condolence. Amateurs make schedules, swap notes on available DX, swap gear, and any of this can be done by radiogram.

You don't have to know anything about traffic handling to take advantage of this service. You don't even need a license. Anyone, licensed or not, can take advantage of it. Give your message to any traffic handler, and it will be sent on its way as soon as possible. How do you find the traffic handler? If you don't know any, you're almost certain to be able to find an amateur who does. Or look in the Section Activities reports in any issue of QST, buried among the advertising in the back. If you look at the report from your own ARRL Section, you'll find at the end a listing of stations that have reported traffic for that particular month, with the total traffic each station handled. Most of the stations on the list will be able to take your message, but those with the larger totals will be the best ones to try first, as they most likely have more outlets for traffic and can offer speedier service.

While traffic handlers will be glad to put your message into the system for you, they will be even happier if you decide to try putting it into the system yourself. If you can put it in proper form, so much the better. If you can't, they will be glad to help. After all, there have to be other stations with whom to exchange traffic just as there have to be DX stations if one is to work DX. Traffic stations don't come from Gettysburg or Newington or any other institution. There is a continual need for more new amateurs to become involved to replace those who become silent keys, or turn to other Amateur Radio interests. If there is any hope of interesting you in joining the ranks of traffic handlers on however limited a scale, you will be welcomed with open arms.

Where do you find these traffic handlers on the air? Calling for one by a CQ is not very likely to succeed. They probably call and answer CQs less than most other amateurs. Rather, they tend to operate in nets. The way to go is to find a net with a good signal, no matter where it is located. Check into the net (just give your call sign), then say what you have. From that point on follow the instructions of the Net Control Station. It may be that your message can't be handled by anyone on the net, but at least you'll be told where to find someone who can take it.

You will find two principal kinds of nets that handle traffic. The ARRL type will be found on 80 and 40 meters mainly, but on other bands too, which follow the formal procedures outlined in the ARRL booklets, "Operating an Amateur Radio Station and Public Service Communications." Many of them are part of the National Traffic System and use procedures developed by military and commercial telegraph services for formal telegrams. Then there are the less formal phone nets found most often between 14 and 30 MHz. On these nets messages are not ordinarily relayed by radio. The net control operator tries to put you in contact with an amateur who has local phone service to the area of destination of your message. In many cases you may be offered an opportunity to talk directly with your addressee by phone patch.

Either way, getting a regular traffic handler to take your message to the system, or doing it yourself, you will be welcome. The system is there waiting to be used.

COMMENTS?

Your columnist also invites comments from readers, favorable or otherwise. Even critical comments are appreciated. At least they show that somebody is reading it, and they may suggest ways to improve it. So let us know what you would like discussed, or the fruit of your experience in the Emergency and Traffic field. Send them to me at Route 3, Box 800, Moncks Corner, SC 29461. (K4ZN)

CRRL APPOINTS GENERAL MANAGER

On behalf of the Board of Directors of the Canadian Radio Relay League, Inc., President Tom Atkins, VE3CDM is pleased to announce the appointment of Raymond Staines, VE3ZJ as General Manager of CRRL, effective immediately.

Ray, an experienced radio amateur, is a professional accountant and independent business consultant, with diversified background, who has been closely associated with CRRL in a volunteer capacity for the past several years. He will be located at CRRL Headquarters in London, Ontario.

CONTEST RULES

FRANK ANZALONE, W1WY
CQ Magazine

Calendar of Events

Jul.	1	Canada Day Contest
Jul.	4-5	Colorado 6 Meter Net Party
Jul.	6-7	Venezuelan SSB Contest
Jul.	13-14	IARU Radiosport Contest
Jul.	13-14	West Coast 160 SSB Contest
Jul.	13-14	Colombian Contest
Jul.	**20-21**	**CQ WW VHF Contest**
Jul.	20-21	SEANET CW Contest
Jul.	20-21	AGCW-DL QRP CW Contest
Jul.	27-28	Venezuelan CW Contest
Jul.	27-29	County Hunters CW Contest
Aug.	3-4	Wild Bunch 160 SSB Contest
Aug.	3-4	ARRL UHF Contest
Aug.	10-11	European CW Contest
Aug.	17-18	SARTG RTTY Contest
Aug.	17-18	SEANET SSB Contest
Aug.	17-19	New Jersey QSO Party
Aug.	24-25	All Asian CW Contest
Aug.	24-25	GARTG RTTY Contest
Sep.	9-15	QCWA Invitational Party
Sep.	14-15	European Phone Contest
Oct.	19-20	Boy Scouts Jamboree
Oct.	**26-27**	**CQ WW DX Phone Contest**
Nov.	**23-24**	**CQ WW DX CW Contest**

*See June Calendar.

Canada Day Contest

0000 to 2400 UTC Mon., July 1

Sponsored by the Canadian Amateur Radio Federation, this contest is held twice a year, July and December. Everybody can work anyone, 2 through 160 meters, single operator, single and all band, multi-operator, single transmitter all band only. The same station may be worked on each band and mode for QSO and multiplier credit.

Exchange: RS(T) and QSO number, and province for Canadian stations.

Scoring: 10 points for each Canadian contact; 4 points if with anyone else. Add 20 bonus points for each QSO with any CARF official station using the suffix TCA or VCA.

Multiplier: Number of Canadian prov./terr. worked on each band and each mode. Total of 26 per band using both modes.

Frequencies: 1810/1840, 3525/3775, 7025/7070/7155, 14025/14150, 21025/21250, 28025/28500, 50040/50110, 144090/146520. Try SSB on the hour and CW on the half hour.

Awards: Certificates to the top-scoring stations in each class, in each Canadian prov./terr., U.S. call area, and DX country. Trophies for the overall single operator all band winner and multi-operator all band station.

Include a summary sheet showing the scoring, etc., and a dupe sheet with your entry. Official log forms are available from the CARF. Include a large SASE for log forms and results.

Mailing deadline is July 31st, and logs go to: CARF Contest, c/o N. Waltho, VE6VW, P.O. Box 1890, Morinville, AB, T0G 1P0 Canada.

Note: A 50 point bonus to stations providing communication from a national park or to stations using the special prefix for the National Parks Centennial during the Canada Day Contest.

Colorado 6 Meter Net Party

1400Z Thurs. to 0300Z Fri., July 4-5

The Colorado 6 Meter Net invites all 6 meter operators to participate in this activity on July 4th.

Exchange: Signal report, state, name, and SIN number for members.

Scoring: Contacts with SIN members are worth 3 points, with non-members 2 points. Multiply total points by number of states worked for final score.

Awards: Certificate to the #1 and #2 scorers. Endorsement stickers if you contact 25 or more SIN members.

Send your log within 30 days to: W0ETT, P.O. Box 6602, Denver, CO 80206. Include an SASE for any awards.

Venezuelan Contest

Phone: July 6-7 C.W.: July 27-28
0000Z Saturday to 2400Z Sunday

This is the 23rd yearly contest celebrating Venezuela's independence. It's a world-wide type contest; therefore, do not confine your activity to working YV's only. Use all five bands, 10 through 160 meters. There are four classes: Single operator, single and all band, and multi-operator single and multi-transmitter.

Exchange: RS(T) plus a QSO number starting with 001.

Points: Contacts between stations in different countries, 2 points. Between stations in the same country zero (0), but permitted for multiplier credit.

Multiplier: One for each YV call area, each U.S. call area, and each country (including own) worked on each band.

Final Score: Total QSO points from all bands multiplied by the sum of the multiplier from each band.

Awards: A plaque to the highest scorer in each class. Medals to the highest scoring single operator in each continent and the Bolivarian countries (Bolivia, Colombia, Ecuador, Panama, Peru).

Certificates to stations in the Americas working 15 YV stations and 10 different countries; European and African stations working 10 YV's and 10 countries; and Asia and Oceania stations working 5 YV's and 10 countries.

Use a separate log sheet for each band, and a summary sheet showing the scoring, your name and address in block letters, and the usual signed declaration. It is requested that all award applicants include a remittance of $2.00 or its equivalent in IRC's.

Mailing deadline is August 15th for phone entries and September 15th for c.w. They go to: Radio Club Venezolano, P.O. Box 2285, Caracas 1010-A Venezuela.

West Coast 160 SSB Contest

0000Z Sat. to 2359Z Sun., July 13-14

This is the summer edition of the "West Coast Bulletin" 160 meter contest. Only single operator stations are eligible. There are two classes, subscribers and non-subscribers. There are five subclasses: 3 kw, 2 kw, 1 kw, 250 watts PEP, and QRP.

Exchange: RS and QTH.

Scoring: 20 points per QSO. Multiply total by (US states + VE provinces + DX countries) worked for final score. Three QSOs will be deducted for each duplicate contact that has not been removed from the log.

Awards: Certificates to winners in each state, province, and DX country for both classes. Plaques to the two overall winners.

A signed declaration indicating the power used is requested. Reporting a false power rating means disqualification and also being banned from participation for three years.

Mailing deadline for logs is August 31st and they go to: R. Koziomkowski, KA1SR, 5 Watson Drive, Portsmouth, RI 02871.

IARU Radiosport

0000Z Sat. to 2400Z Sun., July 13–14

The format is the same as it was last year. It's a worldwide competition, all bands, 160 through 2 meters, single and multi-operator.

Categories: Single operator, c.w. only, phone only, and mixed mode. Multi-operator use mixed mode, single transmitter.

Single operator stations are limited to 36 hours of operating time. Off times must be at least 30 minutes and must be indicated in your log. There is no time limit for multi-operator stations, but you must remain on a band at least 10 minutes at a time. The same station may be worked only once per frequency band regardless of the mode.

Exchange: RS(T) and your ITU zone.

QSO Points: Contacts within your ITU zone, 1 point. Contacts within your continent but a different zone, 3 points. Contacts with a different continent, 5 points.

Multipliers: Number of different ITU zones worked per band.

Final Score: Total QSO points from all bands times the sum of the multipliers from each band.

Awards: Certificates to the top scorers in each category, in each ARRL section, each ITU zone, and each country. Achievement awards are available for making 250 and 1000 QSOs and/or contacting 50 or more zone multipliers. In case of multiple award levels achieved, only the highest award will be issued.

Disqualification rules will be observed for taking credit for duplicate contacts in excess of 2% and also for not observing rules and regulations of the contest.

U.S. and Canadian entries are requested to use official log and summary sheets, which may be obtained from the ARRL. A large s.a.s.e. with at least 39¢ postage will get you a good supply, and also an ITU zone list.

All entries should be sent to IARU Headquarters, Box AAA, Newington, CT 06111 U.S.A. Mailing deadline is August 15th.

Colombian Contest

0000Z Sat. to 2359Z Sun., July 13–14

There have been a few changes in the format of this year's contest, so a close check of the rules is suggested. It's still a world-wide contest on all six bands, 1.8 through 28 MHz, CW only and SSB only.

Classes: Single operator, single and all band, multi-operator, single and multi-transmitter. (There is only one single band class, that used on 14 MHz.)

Exchange: RS(T) plus a three-figure QSO number starting with 001.

Scoring: *For non-HK's*—QSOs with HK's 10 points, with other countries 5 points, with own country 1 points.

For HK's—QSOs with other countries 10 points, with other HK's, 5 points.

Multiplier: Number of different countries and HK call districts worked on each band.

Final Score: Total QSO points times the sum of the multiplier from each band.

Awards: Certificates to each station showing a minimum of 50 contacts, at least 10 of which are HK's on SSB or 5 if on CW. Plaques to the overall winning HK and non-HK in each class and each mode, and for second-place winners and HK's in each call area.

Use a separate log sheet for each band. Indicate the multiplier in a separate column only the first time it is worked on each band. A summary sheet showing the scoring and other essential information and the usual signed declaration are also required.

Disqualification rules regarding taking credit for duplicate contacts, violation of rules and regulations, etc., will be strictly enforced.

Mailing deadline for all entries is August 30th to: L.C.R.A. Contest Committee, Apartado Aereo 584, Bogota, Colombia.

AGCW-DL QRP Contest

1500Z Sat. to 1500Z Sun., July 20–21

This is the summer edition of this QRP c.w.-only contest. The same station may be worked on each band, 1.8 through 28 MHz. There are five classes:

Class A—3.5 watts or less input. *Class B*—10 watts or less, for single operators. *Class C*—10 watts or less for multi-operators. *Class D*—QRO stations, over 10 watts input (may work only QRP stations). *Class E*—s.w.l.'s.

Class C may operate the full 24 hours; others must take a 9-hour break.

Exchange: RST, QSO no., and power input, i.e., (559001/5) (579001/QRO). Add "X" if using crystal control.

Scoring: QSO within own country, 1 point. With other stations in own continent, 2 points. With DX outside own continent, 3 points. (Double points if using crystal control.)

Multiplier: One for each DXCC country, and one for each DX station worked. Call areas in JA, PY, VE, W, and ZS count as separate multipliers.

Final Score: Total QSO points from all bands times the multiplier as indicated.

Awards: Certificates for the first places in each class and band.

Using a separate log sheet for each band, and a summary sheet showing the scoring, name and address, and other essential information. Mail logs within six weeks of the end of the contest to: Siegfried Hari, DK9FN, Spessartstrasse 80, D-6453 Seligenstadt, West Germany (include 1 IRC for a copy of the results).

CQ WW VHF WPX Contest

0000Z Sat. to 2400Z Sun., July 20–21

This is the first *CQ* World-Wide VHF Contest, and it received extensive coverage in the February and May issues. However, a repeat of the rules may be in order for the newcomers who do not have those issues.

Bands: All bands from 6 meters through 23 cm may be used (50, 70, 144, 220, 432, 1296 MHz).

Modes: All modes may also be used, but not repeater contacts. Satellites are considered repeaters.

Exchange: Your call and a consecutive QSO number starting with 001.

Multiplier: Each different prefix worked on each band.

Scoring: 1 point per QSO on 50, 70, or 144 MHz; 2 points for QSOs on 220 and 432 MHz; and 4 points on 1296 MHz.

Final Score: Total QSO points times the sum total of prefixes worked on each band.

Unlike the HF WW WPX Contest, the same station can be worked on each band for multiplier credit.

Classes: Single operator, single and all band, high or low power (low power defined as 25 watts or less PEP output). Multi-operator, single and all band. Portable using temporary power source. And FM only.

Awards: All participants will receive a commemorative certificate in celebration of this, the first *CQ* WW VHF Contest. Special certificates to the top-scoring stations and to those making a special effort in each class, in each call area or country.

Official log forms are available from *CQ*. Include a large SASE with your request to the office, 76 N. Broadway, Hicksville, NY 11801.

Your logs, however, go to: SCORE, P.O. Box 1161, Denville, NJ 07834.

SEANET DX Contest

C.W.: July 20–21 S.S.B.: Aug. 17–18
0001Z Sat. to 2359 Sun.

The object of the contest is to contact stations within the SEANET area. The same station may be worked once on each band. Cross-band or cross-mode

contacts are not permitted, and multi-operator stations are limited to one signal during the same time period.

Classes: Single operator, single and all band, and multi-operator all band.

Exchange: RS(T) plus a three-figure QSO number starting with 001.

Scoring: *Stations outside SEANET area,*

(a) Contacts with stations within the NET area with the following prefixes: 20 points on 160; 10 points on 80 and 40; 4 points on 20, 15, and 10 (DU, HS, YB, 9M2, 9M6, 9M8, 9V1, V85).

(b) With stations in other NET areas: 10 points on 160; 5 points on 80 and 40; and 2 points on 20, 15, and 10.

(c) Contacts between stations outside the NET area have no value.

(d) Multiplier of three for each NET country worked.

Stations within SEANET area,

(a) Contacts with stations outside NET area: 10 points on 160; 5 points on 80 and 40; 2 points on 20, 15, and 10.

(b) Between stations within the NET area: 6 points on 160; 3 points on 80 and 40; 1 point on 20, 15, and 10.

(c) Contacts with stations in own country have no value.

(d) Multiplier of 2 for each NET country worked, 3 if country outside NET area.

Final Score: Total **QSO** points times the sum of the multiplier points.

SEANET Prefixes: A4, A5, A6, A9, AP, BV, CR9, C21, DU, EP, HL, HS, H44, J (etc.), JD1, JY, KA, KC6, KG6/KH2, KH6, KX6, P29, S79, VK, VQ9, V85, VS6, VS9K, VU2, XU, XV5, XW8, YB, YJ8, ZK, ZL, 3B6/7, 3B8, 3D2, 4S7, 4X, 5W1, 5Z4, 8Q7, 9K2, 9M2, 9M6/8, 9N1, and 9V1.

Results will be announced at the SEANET Convention. Logs must be received no later than October 31st and go to Eshee Razak, 9M2FK, P.O. Box 13, Penang, Malaysia.

The SEANET Convention will be hosted by the PARA this year and will be held in Cebu City, the Philippines on Nov. 22–24. Contact Antonio F. Joson, Jr., DU1OD, 131 Guadalope St., Morning Breeze, SUBD., Caloocan City, M.M., Philippines for more information.

County Hunters C.W. Contest

0000Z Sat. to 0200Z Mon., July 27–29

The C.W. County Hunters Net is promoting this year's contest. Mobile and portable operation from less-active countries is welcome and encouraged.

The same station may be worked on each band, mobile and portables from each county change, for QSO credit. Mobiles operating on county lines give and receive one QSO number, but each county is valid as a multiplier. (Mobiles and portables must identify by signing /M or /P after their call.)

Exchange: QSO no., RST, category, county and state for U.S. stations, province or country for others.

Scoring: QSOs with fixed stations are worth 1 point; with mobile and portables, 3 points. Multiply total QSO points by sum of U.S. counties worked for your final score.

Frequencies: 3575, 7055, 14065, 21065, 28065. On 20 and 40, mobiles and portables should call CQ below the suggested frequency. Fixed stations use above the suggested frequency.

Awards: Certificates will be awarded to the winners in three categories: F—Fixed or fixed portables in each state, province, and country with 1,000 or more total score; P—Portable in each state operating from a county other than his normal location with 1,000 minimum score; M—Mobile in each state operating from 3 or more counties with a minimum of 10 QSOs at least from each of 3 counties.

Plaques to the top-scoring mobile, portable, and fixed station in the US who also meet the above requirements.

A summary sheet showing the scoring is requested, and a check sheet of counties worked is a must for entries with 100 or more contacts. Mailing deadline is September 1st to: C.W. County Hunters Net, c/o Jerry Burkhead, N6QA, 7525 Baltic St., San Diego, CA 92111 (include a large s.a.s.e. for a copy of the results).

Like all *CQ* contests, the new *CQ* World-Wide VHF Contest coming up this month is a world-wide competition and does qualify as a first. However, it's not the first *CQ* VHF Contest, as we sponsored a VHF contest back in the '50s.

SCORE has taken on quite an ambitious project in making this a world-wide affair. Not being knowledgeable about overseas VHF activity, my comments may be a little out of line, but it would seem to me that the US has a distinct advantage over other areas in competing for top honors. With the exception of Great Britain, Japan, and possibly the USSR, the number of prefix multipliers is rather limited, keeping in mind that coverage on the VHF bands is mostly limited to local areas.

Since all entries will be receiving a commemorative certificate, no one will be left without an award. However, the final results of this first contest should present a clearer picture, and proper adjustments can be made the next time around.

Going on to another subject, the May 3rd issue of "The DX Bulletin" covering the Fresno Convention was rather confusing in its report of the awards presented. Hopefully a correction will be made in the bulletin, but I want to set the record straight, even at this late date.

Herb Becker, W6QD, did not originate the *CQ* WPX program. That was Dick Spenceley's idea when he was *CQ*'s DX Editor back in the early '50s. There may have been a YASME award at the Convention for the late Vic Clark, W4KFC, but it had no connection with KV4AA, also a Silent Key. There was a Dick Spenceley, KV4AA Memorial Plaque presented to Dick Norton, 9Y4VT, for making the most QSO's in the *CQ* 1983 WW CW Contest (donated by Dick's 14270 kHz Group). Hope this sets the record straight.

Several other *CQ* contest awards were also made at the Fresno Convention. The Hall of Fame award to W6QD was for his early contribution to DX and because he was the "grandfather" of the *CQ* World-Wide DX Contest and the WAZ program back in the late '40s (with an assist from Larry Lebashman, W2IOP).

Deadline for material for the October issue is July 15th, and August 15th for the November issue. Sending it to my home address will give you a few extra days leeway.

Have you checked the expiration date of your license lately?

73 for this time, Frank, W1WY

(GRI ABT QUALITY! Ed.)

★NEW KENWOOD TS-940S

HIGH PERFORMANCE
8-POLE CRYSTAL FILTERS
From INTERNATIONAL RADIO INC.

TS-940S SSB 2.1 KHZ MATCHED SET: Consists of one 8.83 MHz 2.1 kHz drop-in 8 pole crystal filter and one 2.1 kHz 455 kHz 8 pole crystal filter (wired in). Our matched set will provide an overall system selectivity of 2.0 kHz at 6 dB and 2.5 kHz at 60 dB. A shape factor of 1.25. The stock 940 SSB filter is specified at 2.4 kHz or more at 6 DB and 3.6 kHz or less at 60 dB. A shape factor of 1.5

TS-940S CW-400HZ MATCHED SET: Drop-in consists of one 8.8 MHz 400 Hz 8-pole crystal filter and one drop-in 455 kHz 400 Hz filter. Provide system selectivity of 400 Hz at 6 dB and 700 Hz or less at 60 dB. A shape factor of 1.75 or less.

PRICES:
SSB or CS Matched Set $139.00
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All crystal filters guaranteed two years to original purchaser.

If you ever need technical assistance, International Radio Inc. offers a full service laboratory.

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INTERNATIONAL RADIO, INC.
1532 SE Village Green Dr., Port St. Lucie, FL 33452
(305) 335-5545

CQ World-Wide WPX CW Contest All-Time Records

The contest is held each year on the last full weekend of May. The All-Time Records will be updated and published annually. Data following the calls below are: year of operation, total score, and number of prefix multipliers.

BY STEVE BOLIA, N8BJQ/6 & BERNIE WELCH, W8IMZ

WORLD RECORD HOLDERS

Single Operator

1.8	LZ2CJ('84)	89,872	137
3.5	EA8RL('84)	453,456	201
7.0	OA4AWD('82)	1,752,254	329
14	CY3BMV('83)	2,341,680	528
21	HD0E('80)	3,544,416	496
28	LU8DQ('80)	1,627,660	388
AB	L8DQ('83)	4,128,084	548

Multi-Operator Single Xmtr.

	VP2EC('84)	7,599,480	664

Multi-Operator Multi-Xmtr.

	YZ1EXY('83)	9,858,240	756

U.S.A. RECORD HOLDERS

Single Operator

1.8	AE6U('80)	3,444	42
3.5	NE6W('83)	105,672	148
7.0	N6CW('84)	960,300	330
14	N8II('83)	1,542,060	468
21	K6LL/7('81)	1,433,457	459
28	N4ZC('81)	136,086	222
AB	KC1F('83)	2,927,400	510

Multi-Op Single Xmtr.

	NA5R('83)	3,986,592	634

Multi-Op Multi-Xmtr.

	NM5M('84)	4,432,883	637

CLUB RECORD

N. Texas Contest Club('84) 53,012,561

WPX (Prefix) RECORD

YT4I('83) 760

QRPp RECORD

4Z4UH('82) 1,028,904

CONTINENTAL RECORD HOLDERS

AFRICA

1.8	No Entrant		
3.5	EA8RL('84)	453,456	201
7.0	EA9GT('81)	579,824	217
14	EL2AV('82)	906,840	330
21	5Z4CS('82)	2,104,245	429
28	ZS6BUX('81)	8,850	50
AB	5Z4MX('84)	2,264,342	446

ASIA

1.8	UA9ADY('84)	39,996	66
3.5	4Z4DX('81)	379,652	182
7.0	4Z4DX('80)	717,336	243
14	UA9YAN('84)	1,511,146	437
21	UL7QF('83)	1,220,083	373
28	4X4UH('81)	1,081,262	338
AB	UF6CR('84)	3,084,480	540

EUROPE

1.8	LZ2CJ('84)	89,872	137
3.5	RB5IM('84)	383,608	202
7.0	OK1KSO('84)	1,110,338	338
14	YU4GD('84)	2,147,148	564
21	YU3BO('81)	1,550,390	394
28	9H1CH('81)	307,433	259
AB	YT2D('81)	2,826,075	525

Multi-Op Single Xmtr.

AF	ZS6CT('84)	3,129,216	464
AS	UZ9A('80)	5,500,135	511
EU	LZ2KTS('84)	5,444,916	673
NA	VP2EC('84)	7,599,480	664
OC	KH6XX('84)	4,646,859	553
SA	L8DQ('84)	5,952,111	627

NORTH AMERICA

1.8	VE3MFA('84)	6,552	36
3.5	NE6W('83)	105,672	148
7.0	VE3BMV('84)	1,489,950	385
14	CY3BMV('83)	2,341,680	528
21	KP4EQF('83)	1,816,416	476
28	KP4EQF('81)	577,500	300
AB	KP2A('80)	3,463,593	483

OCEANIA

1.8	No Entrant		
3.5	T32AF('83)	93,480	95
7.0	VK2CIA('84)	624,672	216
14	VK4QK('80)	1,276,584	344
21	N6HR/NH6('83)	1,203,552	378
28	KG6DX('81)	1,238,806	334
AB	KG6SW('79)	2,848,320	345

SOUTH AMERICA

1.8	PY5AAX('81)	96	6
3.5	4M3AZC('83)	142,780	121
7.0	OA4AWD('82)	1,752,254	329
14	CX7BY('84)	1,832,850	450
21	HD0E('80)	3,544,416	496
28	LU8DQ('80)	1,627,660	388
AB	L8DQ('83)	4,128,084	548

Multi-Op Multi-Xmtr.

AF	EA9CE('84)	4,383,308	482
AS	JA2YKA('83)	5,895,628	614
EU	YZ1EXY('83)	9,858,240	756
NA	CY3PCA('83)	4,977,817	611
OC	KH6XX('81)	7,424,460	540
SA	HD1A('79)	6,052,032	474

QRPp

AF	EA8ACL('82)	139,965	155
AS	4X4UH('82)	1,028,904	344
EU	YU3BC('84)	345,950	275
NA	N3RS('83)	494,884	307
OC	KH6CP('84)	125,820	135
SA	OA8V('81)	444,768	246

CLASSIFIED ADS

The Classified Ads rate is 15 cents per word. Remittance in full (check or money order) must accompany copy. Each word, abbreviation, model number, and group of numbers count as one word. No charge for Postal or ZIP code. Ads should be typed or clearly printed on a separate piece of paper. The closing date is the 25th of the month preceding publication. A last name or call must appear in each ad with an address or phone number.

Hamfests and Convention ads are free of charge.

New subscribers to RADIOSPORTING are entitled to one free ad.

ATLANTA HAMFESTIVAL and Georgia State ARRL Convention July 6 and 7, 1985 at Georgia World Congress Center. Box 77171, Atlanta, GA 30357

VE7 CONVENTION The 33rd Annual Pacific North West DX Convention will take place at the Richmond Inn, Richmond, B.C. July 27 and 28, 1985 and is sponsored by BC DX Club. For info contact Andy Pozini, VE7AHA, 4551 Arthur Dr., Delta, B.C. V4K 2X4

REGINA HAMFEST 85 in Saskatchewan will be held at the Wascana Institute of Applied Arts and Sciences in Regina on August 2,3 and 4, 1985. Commercial exhibits and flea market tables at no charge. Contact Lorne Morgan, VE5AGM or George Kosmenko, VE5GF (305) 543-7923

HUNTSVILE, HAMFEST held on the third weekend in August inside air-conditioned Von Braun Civic Center, Huntsville, Alabama. Josh Kelly, N4AVB (205) 837-0569

CLIPPERTON DX CLUB CONVENTION for Hams, DXers and Contesters held on Sept. 21, 1985 in Paris, France. Contact Jacques Saget, F6BEE, 34 Rue Maurice, Ravel, F 78690 - Les Essarts Le Roi, Tel. (3) 041.57.37

NEW BERLIN HAMFEST sponsored by Sangamo County Fair Assn. will be held on Sunday, Spt.22 at the Sangamon County Fairgrounds in New Berlin, Ill. from & a.m. to 3 p.m. Talk-in 146.52 and 146.88. For info contact K9QFR, Box 2, Pleasant Plains, IL 62677 (217) 626-1634

RSO ONTARIO CONVETION sponsored by Radio Society of Ontario and CRRL on Sept. 27 - 29, 1985 at Holiday Inn, City Centre in London, ON. Exhibits, technical, DX and Contest forums. For info contact RSO/CRRL '85, Box 73, Hyde Park, ON NOM 1ZO (519) 471-7691

CONTEST FORMS FOR CQ WW, CQ WPX AND CAN-AM CONTESTS. Each set includes summary sheet, multiplier check sheet, dupe sheets for Europe, VE/W and rest of the world, log sheets with 100 QSOs per page as described in RADIOSPORTING Dec.84. Send business size SAE and $1 per set to: IRSA, Box 65, Don Mills, ON M3C 2R6

WANTED DIAGRAM for VHF amplifier using 8122 tube. Nick Ferro, KU2A, 719 Plant St. Utica, NY 13502

SPLURGED AT DAYTON Sell matching IC-290A, IC490A, both for $675. AEA Morsematic with memory $125.
Wanted: 1269 gear, also 1.25"x8' fiberglass mast. N3BNA, (717) 626-8794 late nights.

OUR COVER STORY

This beautifull antenna site belongs to N5DU, Bob Evans near Houston, Texas. Bob is a member of the Texas DX Society and of the Madison Electronics gang.

The antenna farm includes the following: 4 el. KLM 40 m beam at 160 feet, 6 el. KLM 20 m at 140', 6 el. KLM 10 m beam at 125', 6 el. KLM 15 m beam at 95', 5 el. HyGain 20 m at 70', 5 el. HyGain 15 m beam at 55', 5 el. HyGain 10 m beam at 45'. The top antenna is rotated with HamIV rotator, the rest of them are using Polar Research 360 deg. rotators mounted around the tower. All guys are non-conductive Phylistran cables.

On low bands Bob is using 4 element W1CF 80 m quarter wave vertical array and quarter wave vertical on 160 meters. For receiving he is using five Beverages, each half a mile long, unterminated.

2 el. HyGain Quad on a separate tower complements this artillery. Talking about the dream location with lot of water around and neighbors far away!

Congrats Bob on a very fine set-up!

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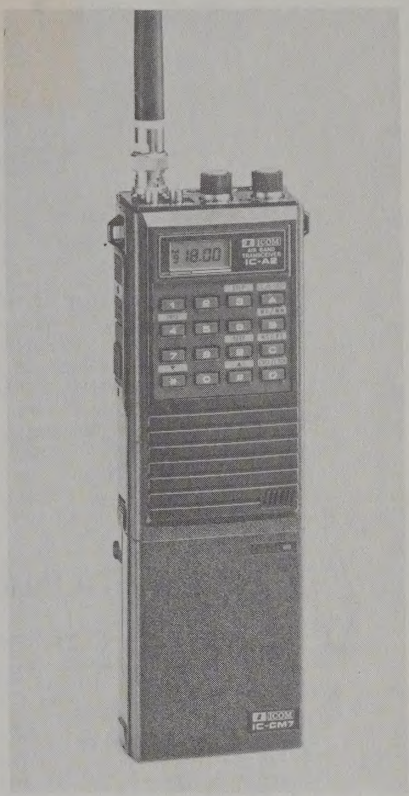
NEW ICOM
AIR BAND HANDHELD



ICOM announces the IC-A2 five watt PEP output aircraft hand held transceiver with the following standard features not available in other handhelds:

all 720 COM and 200 NAV channels plus additional 720 COM and 200 NAV channels

5 W PEP output and 1.5 W low output

10 memory channels with battery back.

LCD readout

Air Watch scanning of two channels with priority lock on, scan memories, plus band or program scan

rugged metal construction, ultra compact and environmentally sealed

lifetime warranty

multiple charging options for flexibility

frequency lock

effective noise blanker

operates directly on aircraft 12 V system and aircraft antenna system

slide-off battery pack for in flight charge

receiver is a double conversion superhet with sensitivity less than 1 uV for 7 dB COM band and less than 2 uV for 6 dB (S+N)/N in NAV band

transmitter operates in 6A3 mode (AM)

The ICOM IC-A2 comes standard with an IC-CM7 rechargeable NiCd battery pack. charger, LC-14 soft leather case and earphone.

A wide selection of options and accessories are available including the ICOM HS-10 headset and HS-10SA VOX unit or HS-10SB push-to-talk switchbox.

The ICOM IC-A2 will be available in August 1985, and may be purchased only through authorized ICOM avionics dealers/distributors or FBO shops.

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INTERNATIONAL RADIOSPORT ASSN.

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Purpose and objectives:

1. To promote international friendship and goodwill through sportsmanship, radio contesting and DXing.
2. To improve the quality of amateur radio operators and operating through education and experience, by voicing the opinions of radio amateurs that are experienced and have contributed to the hobby.
3. To promote amateur radio contesting and other operating-related activities as a sport, and to provide the publicity and recognition that it deserves in the public media.
4. To publish timely articles in the monthly magazine "RADIOSPORTING" on various subjects of interest to Contesters, DXers, SWL, VHF, UHF and microwave enthusiasts, on RTTY, SSTV, computers in communications, fox hunting and anything of interest to the active ham striving for self-improvement. To feature technical articles on equipment design and modifications, antenna construction, radio-wave propagation, and commercial equipment reviews by qualified people.
5. To organize, as an annual event, the "International Contest Symposium," which runs parallel (evenings) with the Dayton Hamvention; to feature timely topics with the participation of some of the world's leading amateurs at the Syposium.
6. To hold an annual Awards Dinner with an entertainment program, where awards for various achievements will be presented.
7. To maintain and publish all time record tables for significant contests.
8. To sponsor and run an annual World Contest Championship, based on results of a number of major contests, with the annual "Contester of the Year" awards in various categories.
9. To administer the "Contest Hall of Fame" and vote on awarding membership to those who have significantly contributed to the sport of contesting.
10. To coordinate and assist in the scheduling of international contests.
11. To hold regular weekly meetings on air on 20 and 80 m. (14.200, 3.830)
12. To provide an automatic, computer controlled bulletin station that transmits the latest DX and Contest news on CW and RTTY.(14.098)
13. All in all, the IRSA is dedicated to the pursuit of excellence and quality in amateur radio by promoting, publicizing and leading the way.
14. Attractive numbered membership certificates and badges are issued to members.
15. IRSA is run by contesters who are selected for their accomplishments and it is independent of any national or commercial organizations.
16. IRSA will assist and sponsor Contests/DXpeditions, Trophies and other radio sporting and publicity events.
17. IRSA is a non profit organization, with all proceeds to be used to finance events and awards sponsored by IRSA and to cover expenses incured by Association.
18. IRSA members can display the IRSA logo on their QSL cards and correspondence; members agree to obey the Contester's Code of Ethics and to promote it.

The initial fee to join the IRSA is US $12; it includes the cost of a certificate and a badge. The yearly membership dues are US $5. (Or 24 and 10 IRCs resp.)

Honorary Life Membership will be awarded to those who significantly contribute to IRSA and the sport of contesting.

Members are entitled to be elected and to elect officers of IRSA. They will also enjoy many services and privileges offered exclusively to members.

RADIOSPORTING

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BY AND FOR ACTIVE RADIOAMATEURS

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